

# NATION'S BUSINESS



FEBRUARY, 1928

## A Plea for More Government in Business

By A MANUFACTURER

## 80 Years of Gold

By John Hays Hammond



MORE THAN A QUARTER MILLION CIRCULATION



SINCE 1858, THE WORLD'S LARGEST MAKERS OF QUALITY BAGS

# Packing and Shipping Costs *Lowered*

*for hundreds of industries which  
now ship in Bemis Bags*

When Bemis Bags have replaced other containers for shipping, the following vital factors entered into the decision:

First cost, cost of handling, tare weight, storage space, and, finally, suitability.

It has been found that Bemis Bags give more than ample protection to the products, against all the hazards of transportation — usually better protection than more expensive containers.

Is there any reason why you should not have the lower packing and shipping costs afforded by Bemis Bags? To find out, ship one unit of your product to us in its usual container; we will ship it back to you in a Bemis Bag—or tell you frankly it can't be done!

**BEMIS BRO. BAG CO.**

Address: General Sales Offices, ST. LOUIS, U. S. A.

**Bag Factories**

ST. LOUIS  
MINNEAPOLIS  
OMAHA  
NEW ORLEANS  
SAN FRANCISCO  
INDIANAPOLIS  
MEMPHIS  
KANSAS CITY  
SEATTLE  
WINNIPEG  
HOUSTON  
BROOKLYN  
BUFFALO  
WICHITA  
WARE SHOALS, S.C.

**Cotton Mills**

ST. LOUIS  
INDIANAPOLIS  
BEMIS, TENN.

**Bleachery**

INDIANAPOLIS

**Paper Mill**

PEORIA

# BEMIS BAGS



COTTON ~ BURLAP ~ PAPER ~ PRINTED OR PLAIN

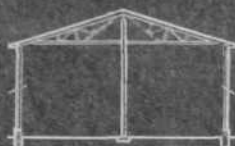


# INDUSTRIAL BUILDINGS SIMPLIFIED *and* STANDARDIZED

## SERIES "A" PITCHED ROOF TYPES



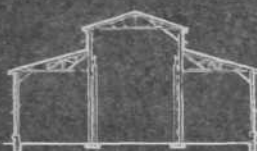
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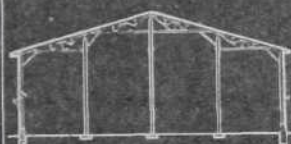
Type 2



Type 3



Type 3-M



Type 4



Sawtooth Type

The Series "A" and "B" types of Truscon Buildings can be variously grouped and arranged.



These groups can be any length or width and a considerable variation is possible in the height.



Standardization permits unlimited extension and group plans can be completed as growing needs and demands dictate.

In Truscon Buildings, standardized units are combined in innumerable ways in any arrangement of doors and windows to give you exactly the building you need. Your building is quickly erected and is the most economical, fire-safe and permanent construction for the money invested.

Truscon Buildings are the result of engineering knowledge, backed by the best of manufacturing facilities and twenty-five years of practical experience.

## STEELDECK ROOFS

### INSULATED AND WATERPROOFED

Used on all types of Truscon Buildings. A deck of steel; strong, light in weight, lasting and fire-safe; with an insulation of varying thickness to meet any internal or external conditions; with a waterproofing from standard specifications.

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO  
MANUFACTURERS AND ENGINEERS

*Warehouses and Truscon Offices in all Principal Cities*

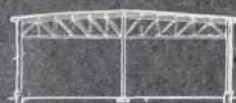
FOREIGN TRADE DIVISION, 90 WEST ST., NEW YORK CITY  
TRUSSED CONCRETE STEEL CO. OF CANADA, LIMITED,  
WALKERVILLE, ONTARIO

THE TRUSCON LABORATORIES, DETROIT, MICH.

## SERIES "B" FLAT ROOF TYPES



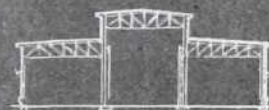
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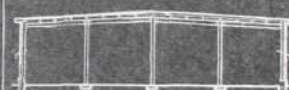
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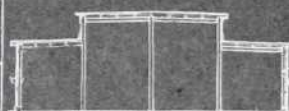
Type 3



Type 3-M



Type 4



Type 4-M

Lanterns may be used on all types of buildings for additional daylight and better ventilation.



Canopies and Lean-tos can be added and may be removed again, later, to provide for extensions.



The Truscon plan, by its flexibility, adapts itself to both present individual needs and possible future requirements.

# TRUSCON

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO

☐ Please send me without obligation the book "Buildings by Truscon". Interested in a building for \_\_\_\_\_ approximate size \_\_\_\_\_

Length Width Height

Also interested in the following Truscon Products

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| <input type="checkbox"/> Metal Lath          | <input type="checkbox"/> Steeldeck Roofs     |
| <input type="checkbox"/> Steel Joists        | <input type="checkbox"/> Welded Steel Fabric |
| <input type="checkbox"/> Steel Doors         | <input type="checkbox"/> Structural Steel    |
| <input type="checkbox"/> Engineering Service | <input type="checkbox"/> Steel Poles         |

Firm Name \_\_\_\_\_

Individual \_\_\_\_\_

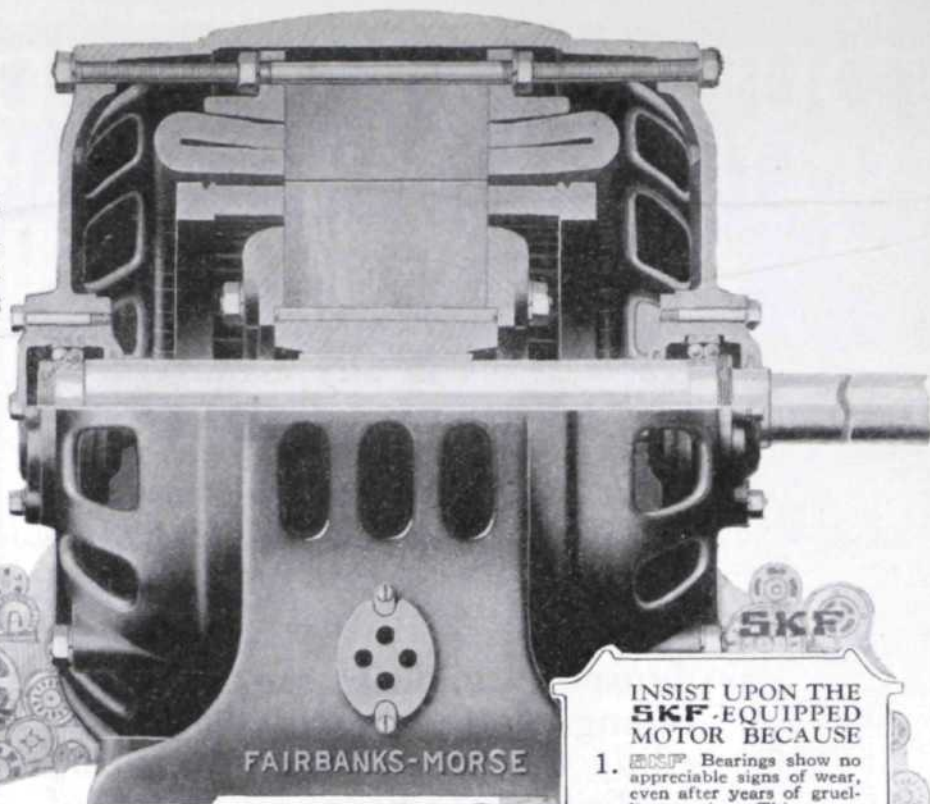
Address \_\_\_\_\_

NB 2-28



57

OF THE LEADING  
ELECTRICAL MAN-  
UFACTURERS USE  
**SKF** BEARINGS AS  
STANDARD EQUIP-  
MENT



## WHY DO THEY SELECT **SKF**— the Highest Priced Bearing in the World?

**Y**OU can't build a bearing on a basis of economy and expect it to produce economy in operation.

You can't put anything less than the best into a bearing and expect it to function at its best.

You can't expect a bearing to function properly in a motor if it never proved its ability to function properly in the laboratory and field.

And so, in spite of the fact that **SKF** Bearings are the highest priced bearings in the world, the leaders in the electrical industry, as in all industries, select **SKF** Bearings as standard equipment.

Nothing is apt to cost so much as a bearing that cost so little.

*It costs more to replace a poor bearing than to buy the best one that **SKF** ever produced. And **SKF** Anti-Friction Bearings are the highest priced in the world.*

### INSIST UPON THE **SKF**-EQUIPPED MOTOR BECAUSE

1. **SKF** Bearings show no appreciable signs of wear, even after years of grueling service. This means continued and permanent armature alignment.
2. **SKF** Bearings on electric motors require lubrication only every six months.
3. **SKF** Bearings are so housed that lubricant cannot penetrate and short-circuit the coil windings.
4. **SKF** Bearings are self-contained and require no adjustments.



# SKF

## Ball Bearings



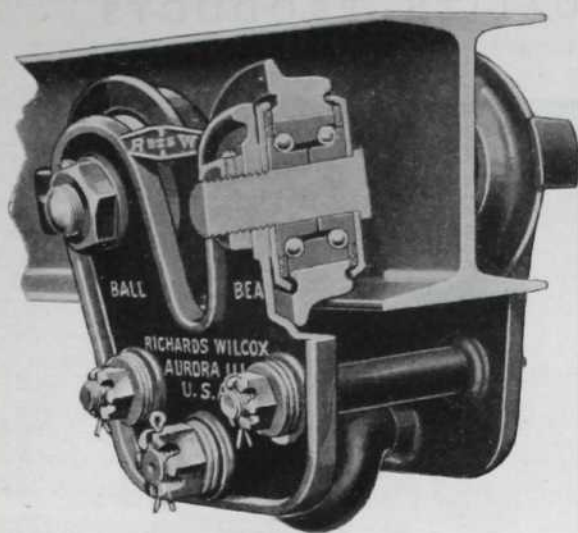
## Roller Bearings

**SKF** INDUSTRIES, INC.

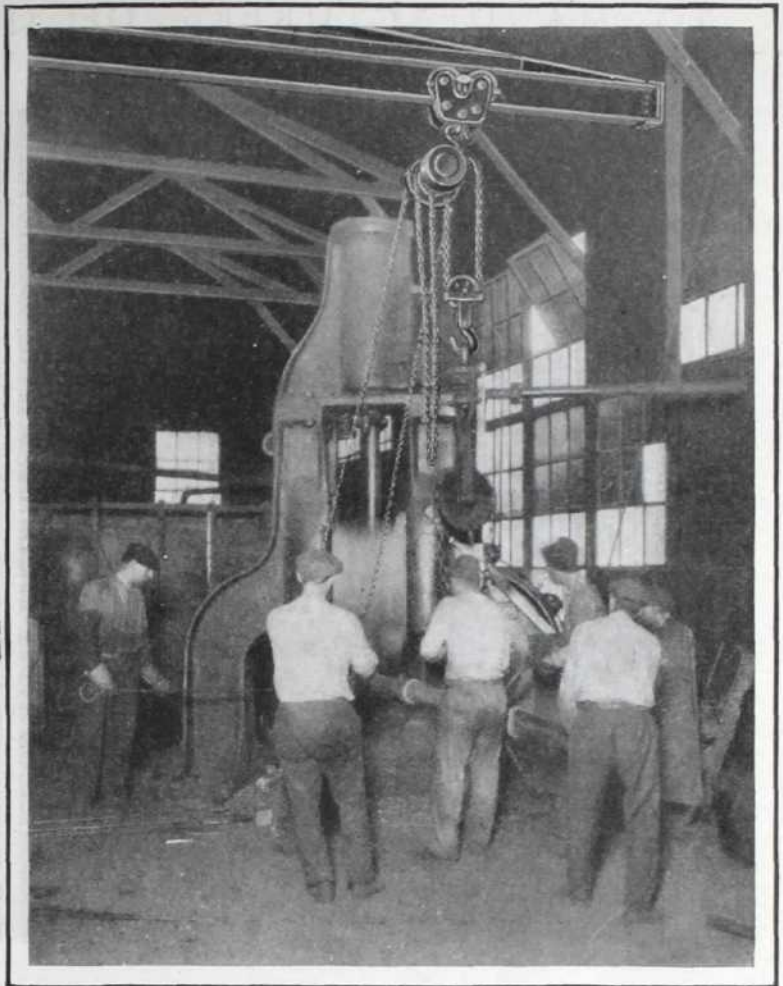
40 E. 34th ST., NEW YORK CITY

1943





## "R-W Trolleys 50% more efficient"



*Wm. H. Mitchell, president of the Mitchell Steel Company,  
Cincinnati, told a Gould Reports Investigator:*

**T**HE MAKING of heavy forgings requires handling very heavy billets and blooms, and the selection of the proper cranes, trolleys, and hoists is important, especially when moving hot billets from the furnaces to the steam hammers.

"After trying many types of trolleys and making exhaustive tests, we adopted Richards-Wilcox Ball Bearing Trolleys on jib cranes used to move hot metal. Men working on the hand operated cranes had become accustomed to exert a very strong push and pull to move the trolleys formerly used. They found the operation of the R-W equipment very much easier; and this means that less time is required to get

the billets under the hammers, with a proportionate reduction of heat loss.

"Our tests show that the R-W Trolley is approximately 50% more efficient than any other trolley we have tried, and we have tried a great many. Furthermore, because the added efficiency of the R-W Trolley conserves the strength of our men and saves operating time, we have been able to increase our production 10% to 11%. This production increase, with the reduced labor costs resulting, paid for the trolleys almost immediately. Although our R-W equipment has been in constant use for more than 2 years, it is in excellent shape, and has not required a cent for repairs."

*An R-W trolley will be sent to any responsible manufacturer for free trial—prove for yourself its outstanding superiorities under your actual working conditions*

# Richards-Wilcox Mfg. Co.

**"A Hanger for any Door that Slides."**

New York • • • AURORA, ILLINOIS, U.S.A. • • • Chicago  
Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines  
Minneapolis Kansas City Los Angeles San Francisco Omaha Seattle Detroit  
Montreal • RICHARDS-WILCOX CANADIAN CO., LTD., LONDON, ONT. • Winnipeg



## TO MANUFACTURERS OF QUALITY PRODUCTS



The River of Work—We are privileged to reproduce here one of a series of drawings of industrial subjects by the late Joseph Pennell, one of America's great artists. Courtesy J. B. Lippincott Co.

## Best for your customer—best for you

Service is still legal tender—however often counterfeited.

You elect to build quality because you are concerned with supplying a need more completely, more effectively. Otherwise you would be competing merely for the lowest price market. This is precisely our position.

We take pride in doing more than the making and selling of lubricating oils; we make and sell results—lubrication to yield the largest return per dollar spent.

A leading automobile manufacturer recently made a friction test on one group of machines. With correct, high quality Gargoyle lubricants in use, friction was reduced to a point where in this one unit \$500 a year is saved in power.

By extending the use of these



Lubricating Oils  
for Plant Lubrication

lubricants to similar machinery throughout the plant an annual saving of several thousand dollars will result. A plant which looks into the ultimate cost of the oils it is using discovers which oils are really costly, and which are really cheap.

After our oils are installed in a plant our engineering staff cooperates with the operating personnel to maintain effective lubrication results.

Our oils and services are available throughout the world.

# Vacuum Oil Company

HEADQUARTERS: 61 BROADWAY, NEW YORK. BRANCHES AND DISTRIBUTING WAREHOUSES THROUGHOUT THE COUNTRY



## Who's Who in This Issue

**D**RIVING through new country one watches signboards. The one that reads: "Allenboro, forty miles," may tell you where you'll stay the night, while its fellow sign that says: "Joe's—Coffee and Doughnuts, half a mile ahead," may fix your next stop. Both helpful bits of information. Let's put up some signposts as to What's What and Who's Who in this issue of NATION'S BUSINESS.

**JULIUS KAHN**, who writes the article "A Plea for More Government Regulation" in this number, is a manufacturer of steel products in Ohio. It is his first appearance in our columns, but he has something to say, and he says it forcefully. We didn't decide to print it without much editorial soul-searching, for he advocates some things which this magazine has always opposed.

But few questions are engaging the attention of business more than those growing out of the possibilities and the realities of overproduction and the resulting competition and high selling costs. We felt that Mr. Kahn's point of view was one worth considering.

**JOHN HAYS HAMMOND** writes of gold from the fullness of a lifetime spent in dealing with the precious metal. He lives in Washington. He has worked in South Africa with Rhodes and the Barnatos and in California and Colorado and in many other places. He was sentenced to death for a part he did not play in the Jameson raid. As a special envoy from the United States, he saw a king crowned.

**BERTON BRALEY**, who sang to us last month of Babbitts, writes a prose poem—or perhaps we should call it prose sprinkled with verse—about the machine-tool makers, the men who have made possible our modern production methods.

**"WHO'S WHO"** says of Harrison E. Howe that he has been a "leader in organizing industrial groups for research." That's what he discusses in this issue in the article, "Trade Bodies Put Science to Work." There are few individual businesses which can carry on worthwhile scientific work of their own. That's where cooperative research fits in.

**READ** with this article Raymond Willoughby's discussion of what the Smithsonian Institution at Washington has to offer business. Mr. Willoughby is

VOLUME SIXTEEN

NUMBER TWO

## NATION'S BUSINESS

Published Monthly by the Chamber of Commerce of the United States, Washington, D. C.

OVER A QUARTER MILLION CIRCULATION

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## "Revolving" Credits As a Trade Factor

A FREIGHT STEAMER plying back and forth between the ports of the Caribbees, with every dollar of the operating costs of each voyage paid through a Credit established by a bank 2000 miles away.

A Dutch exporter in Java making weekly shipments of crude rubber, presenting the shipping documents regularly to his bank in Sourabaya and receiving immediate payment as arranged by the buyer of the rubber in New York.

A New York company's representative stationed in Buenos Aires, receiving his monthly funds as regularly as if he were only "out on the road."

Such are the services rendered to business by "Revolving" Credits, arranged by the American Exchange Irving Trust Company through correspondent banks in every quarter of the globe.

Under a "Revolving" Credit, arranged through the Out-of-Town Office of this Company, repeated payments up to an amount specified will be made to a merchant or representative at a distant point, for merchandise sold or to meet expenses, without the necessity of making new arrangements or giving new instructions.

OUT-OF-TOWN OFFICE

AMERICAN EXCHANGE  
IRVING TRUST COMPANY

Woolworth Building, New York

one of NATION'S BUSINESS staff of associate editors.

ROBERT L. BARNES is a staff contributor. His article on "'Constant Readers' at \$10 a Head" is the first discussion we have seen of the entry of the newspaper in the rank of big business.

CITIES do compete! In the December issue we made a reference to Ohio Columbus Barber, saying that he died recently in Columbus.

Now comes a subscriber who wonders what Akron will do to us for this. We're sorry. We can't state offhand whether he died in Columbus or Akron, but the inference was, of course, that he lived in Columbus.

It is only fair to say that Ohio Columbus Barber was the founder of the Diamond Match Company. Before his death he was the country's largest match-maker, and Akron, or Barberton, which was his post-office address, might justly and proudly claim him as its citizen.

LAST month we closed this little talk about the magazine with a note of criticism. This month, let's quote a pleasant word of praise, doubly pleasant, perhaps, because the writer is one of our own staff, Raymond Willoughby. Here's what Samuel Reber, Director of Traffic Production of the Radio Corporation of America, writes about "Radio, a Test of Democracy," in January:

Mr. Willoughby's article is the best one that I have seen on the subject of the distinction between governmental and managerial elements in the communication problem.

Will you not express to Mr. Willoughby my appreciation for the able way in which he has elucidated this distinction? I feel a particular interest in its presentation, as over three years ago I started out, like John the Baptist, preaching this doctrine, and was more than pleased to see its final acceptance at Washington last fall.

And the advertising manager of a machinery company writes in a gayer vein:

I was quite amused and interested in the editorial on page 12 of the January issue in which Mr. Snap is disclosed as wanting to use Weekly Snips for his soap account because he has it on his library table and wants to see his advertising in it.

I think this is the same party who does not want to use the "Monthly Tablet" for his advertising because he does not have it on his library table and believes, therefore, that nobody else reads it.

We hasten to assure the writer that he is the same man.

WE HAVE tried here to point out the stopping places in the road through the magazine; a road which starts with the contents and ends with the Editor's Specs. Once it ended with Fred C. Kelly's "Human Nature in Business," and an indignant Kelly, when he saw the change, wrote to the editor:

What is your frank opinion of a big bully who will nudge a little fellow right off his seat?



# Why these **NATIONALLY KNOWN** Industries Came to Los Angeles County—



Administration building  
GOODRICH rubber  
plant, open March, 1928.  
1,500 employees.



NATIONAL BISCUIT  
COMPANY, Pacific Coast  
plant, opened 1926.



GOODYEAR rubber factory,  
2,200 employees. Textile Mills,  
600 employees.



SEARS, ROEBUCK & CO. serving  
Utah and Pacific Southwest, employing  
capacity 1800, opened July 1927.

**JOHN W. MAPEL, President**

**GOODYEAR TIRE & RUBBER CO. OF CALIFORNIA**

"Southwestern cotton, for our tire fabric, and rubber from the Far East drawn through Los Angeles Harbor, could be brought together in Los Angeles County at low cost of transportation and with favorable labor efficiency, for serving our entire Western trade."

**S. B. ROBERTSON, Vice-President**

**PACIFIC GOODRICH RUBBER COMPANY**

"We were drawn to Los Angeles County with our Pacific Coast factory by its large local market for our product, its unsurpassed labor situation and excellent distribution coastwise and by rail, to the eleven Western States."

**RUSSELL A. FIRESTONE, Vice-President**

**FIRESTONE TIRE & RUBBER CO. OF CALIFORNIA**

"Mr. C. A. Myers our Director of Engineering selected Los Angeles County for the new Firestone factory because of its central location, excellent railroad and shipping facilities, abundance of water, and most favorable labor conditions."

**C. M. KITTLE, President SEARS, ROEBUCK & COMPANY**

"Los Angeles County and Southern California contain the largest industrial production and retail markets in the West, which, with the rapid growth of population naturally attracted our mail order house and retail stores."

**F. F. BARKOW, Manager NATIONAL BISCUIT COMPANY**

"Our plant for serving the bakery goods trade of the entire Coast is well located in Los Angeles County for assembling all raw material, heavily bought on the Coast, and in the center of the largest consuming market for our products, with economical deliveries to our Western sales branches."

**NATIONALLY** known manufacturers have invested \$27,000,000 and local manufacturers, \$15,000,000—a total of \$42,000,000 new capital for factory expansion and development in Los Angeles County during 1927. The Great Western Market thus continues to attract industry—Specific information furnished by Industrial Department, Los Angeles Chamber of Commerce.



First unit, FIRESTONE Rubber Factory,  
to employ 1,750 persons.

## INDUSTRIAL LOS ANGELES COUNTY



# Where progress is a fixed habit ~ ~

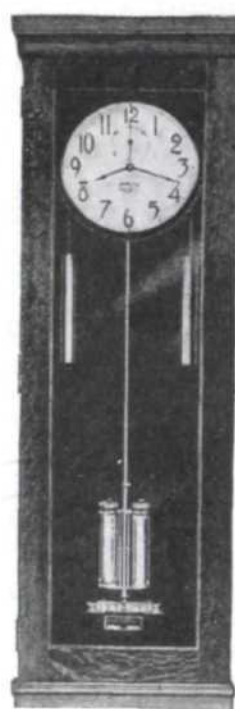
—International time recording, indicating and signalling devices are in use.

And then, to assure full value, these machines, designed to take care of all time-keeping problems, have been fused in an International Electric Self-Regulating Time System.

This is the only electric time system in the world that can make good on the promise of **ACCURATE, UNINTERRUPTED AND UNIFORM** time throughout all units of an organization, under any and all service conditions.

Let us prove this. Consult the nearest International representative—or send for our new Bulletin on Self Regulating Equipment.

*International time recording, signalling and indicating devices, either electric or spring driven, are electrical and mechanical solutions of the host of timekeeping problems confronting the modern business organization.*



International Master Clock



International Job Time Recorder



International Secondary Clock



International Payroll Recorder



International Card Time Recorder



International Time Stamp

## International Business Machines Corporation

INTERNATIONAL TIME RECORDING CO. DIVISION

THE TABULATING MACHINE COMPANY DIVISION

DAYTON SCALE COMPANY DIVISION

50 BROAD STREET, NEW YORK, N. Y.

Branch Offices and Service Stations in  
All the Principal Cities of the World



CANADIAN DIVISION

International Business Machines Co., Ltd.  
300 Campbell Avenue, West Toronto, Ont., Can.



# NATION'S BUSINESS

A MAGAZINE FOR BUSINESS MEN

## Don't Fumble the Torch!

IN AN ancient religious custom, citizens stood at equal intervals, forming a chain. The one nearest the altar lighted a torch, then ran to give it to the next who in turn gave it on to the third. Each man ran without looking behind. His sole interest was to pass on the flaming symbol.

Recently I remarked to a friend: "What a world we are living in today! Never before anything like such wide distribution of the good things of life."

"Ho!" he snorted. "Just wait and take a look at the grandchildren of today's ditch-diggers. There's a picture to contemplate!"

Yes, if—. If those into whose hands has been given the altar-fire of America's industrial philosophy don't fumble the torch.

What a mighty testing ground for men has been set up in America! And how important a rôle American business plays! For where else does the rule, the survival of the fit, of the intelligent, apply with greater force?

Economic laws operate without fear or favor. They cannot be repealed to save the ignorant or the sluggard. Management in 1928 must be alert or investments perish. Better methods, more effective processes, lower costs—hence greater service—are the price to be paid for long business life.

Bankruptcies, insolvencies, passed dividends, dissolution—these are harsh reminders that there is no "executive clemency" to stay the penalties of outworn methods, outworn machinery, outworn management.

Management today reads a page from Harry B. Thayer, who says:

It is easy to fool yourself. It is more difficult to fool the people you work for. It is still more difficult to fool the people you work with. And it is almost impossible to fool the people who work under your direction.

Experience invites this amendment: It is likewise impossible to fool your competitors or the public. The public just will not be damned. It sits in the judgment seat. It bestows the reward.

American industrial life has hung out the sign, MEN WANTED!

Men, with the mind to discover and the will to apply, the energy to organize, the heart to work with their fellows, to achieve for the public good.

And Wickham Steed, famous British editor, visiting us last month, gives his testimony to our spirit of "going ahead" instead of "getting ahead," in our "constant and passionate effort to eliminate waste and to increase efficiency in every form of enterprise."

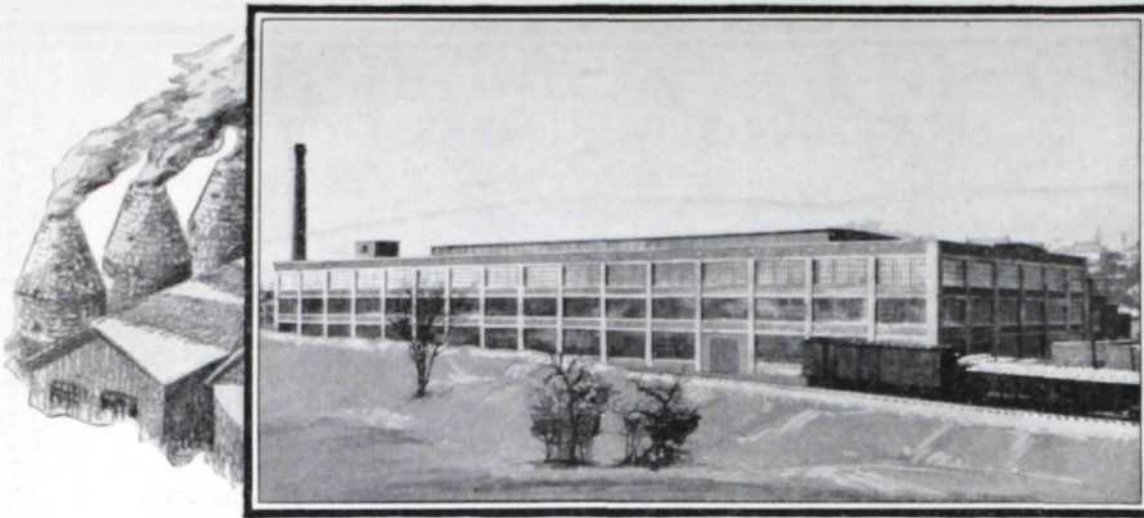
America presents today a business arena in which the finest of human capacities will be sifted out and set to constructive tasks.

Our present happy state is due to our theory of individual reward for individual merit. Our grandfathers passed us the torch. They, thinking of our children, might well admonish us with the lines:

*To you from falling hands we throw  
the torch  
Be yours to hold it high.*

*Merce Thayer*





New modern plant designed and built by Austin for the S. A. Weller Co., Zanesville, Ohio; one of 14 plants built by Austin in the ceramic and glass industries in the last 3 years

## When a Great Industry ... Modernizes Itself

IT would be hard to find any finer demonstration of the spirit of American industry than is displayed today in the china, pottery and glass industries. It is one thing for a comparatively new industry like the automotive, to build factories and equipment for straight line production—large quantity at low cost—but it is something else for the ceramic plants to make the radical change from beehive kilns to tunnel kilns, requiring complete new plants and equipment.

Yet see what is happening within a radius of 60 miles. At Newcastle, Pa., Austin is building a new plant for the Shenango Pottery Co., for the installation of tunnel kilns; at Newell, W. Va., Austin last fall completed a new plant for the Homer Laughlin China Co., which is already producing 60,000 pieces a day. At Zanesville, Ohio, Austin has just turned over to the S. A. Weller Co., makers of fine pottery, a new modern plant for the production of over 30,000 pieces a day.

Savings of many thousands of dollars a month in fuel are reported by the owners of the plants which are in operation, and equally important, a marked improvement in quality due to better methods made possible in the modern plant. Furthermore, the new plants have the pick of the labor.

The Austin Method, so strikingly employed in the ceramic industry, functions with equal effectiveness in scores of others. Engineering, construction, and equipment, all handled under one contract by this one responsible organization, guarantees satisfaction, with speed and low cost.

Phone the nearest Austin Office, wire, or send the Memo below for information, approximate costs, etc., on any type or size of building project.

**THE AUSTIN COMPANY, Engineers and Builders, Cleveland**  
New York Chicago Philadelphia Detroit Cincinnati Pittsburgh St. Louis Seattle Portland  
The Austin Company of California: Los Angeles and San Francisco The Austin Company of Texas: Dallas

# AUSTIN

## Complete Building Service

Memo to THE AUSTIN COMPANY, Cleveland—

We are interested in a

.....project containing.....sq. ft. Send me a personal copy of

"The Austin Book of Buildings." Individual.....

Firm.....City.....

NB 2-28



# NATION'S BUSINESS



Published at Washington by the Chamber of Commerce of the United States

MERLE THORPE, Editor

## As the Business World Wags

### *The Search for Leaders*



THE DEATH of Elbert H. Gary, chairman of the Board of Directors, of the United States Steel Corporation, and selection of J. P. Morgan as chairman of the Board without executive duties, raises questions which interest the public, largely because of the very size of the steel company.

Great management ability has been devoted to building a business with two and a half billion dollars of assets. But has the same skill, attention and effort been devoted to the problem to which a good part of the affairs of men, individual and corporate, is devoted—the training of a successor who shall be ready, when the call comes?

Another question arises. Is it possible that new times and new conditions have brought it about that there are new duties and new functions in the direction of so large a corporation as United States Steel? Can it be that the need of a chairman of the Board as the chief executive officer has ceased to exist, that the Board of itself will undertake responsibilities which have heretofore been undertaken for it?

American business will watch with interest the working out by the Steel Corporation of the answers to these questions.

### *Prescribing for Coal*



THE Secretary of Labor, James J. Davis, has undertaken to diagnose and to prescribe for the soft coal industry. The patient didn't exactly call the doctor in, but he came anyway. His diagnosis is gloomy, his prescription even worse, perhaps.

Said Mr. Davis:

It is tentatively suggested that if the coal industry is to take its place as a going concern among other great industries there is choice of but two ways in that direction.

Either the industry may be left to sink of its own weight in the morass in which it now is, or the stronger elements may be left to absorb the insolvents, on the principle of the survival of the fittest.

Or Congress, which alone has power to act, may heed the suggestion which President Coolidge has twice offered in his messages. The President suggested a special arbitration commission to act in emergency when the Nation's supply of coal is threatened.

Certain representatives at the present coal conference point out, however, that as emergency is a chronic state in

coal, the President's suggestion might have to be carried further.

The question was raised whether supervision of the industry might not have to be given to a body similar to the Interstate Commerce Commission.

A remedy of questionable value. Can we by legislation, by another commission, undertake to save the weaker brothers in the bituminous coal industry? Does the Secretary mean a fixing of soft coal prices with a subsidy from those that can mine cheaply for those whose costs are high?

It's a bitter thing to say, but would it not be better to let those "stronger elements absorb the insolvents?"

The task of creating an economic level by law is a difficult one.

### *Corporation Ups and Downs*



THE GREEDY, soulless, bloated corporation is not always a successful business man. Figures recently issued by the Income Tax Unit show that up to August 31 of last year some 412,763 corporations had reported on their incomes—or losses—for 1926. Of these 248,892, or just about 60 per cent, reported net income. The other 40 per cent showed deficits.

That is not a change for the worse, for, of the corporations which reported on their 1925 business, 58.6 per cent only were successful, while in the bleak year of 1921 only 48 per cent of our corporations reported net incomes. In that year also the average net income of each prospering corporation was about \$25,000, while in 1926 it was \$37,000.

### *The Chamber's Right to Speak*



A CLEAR appreciation of the National Chamber's position in presenting to Congress a tax program from a source which cannot be considered as an ardent supporter of the Chamber—the *Duluth (Minnesota) Labor-World*:

The Chamber of Commerce of the United States is being censured because it calls for tax reductions in excess of those favored by public officials.

One financial newspaper says there is no provision in the constitution for any voluntary organization "to lay down the law" to government officials.

This is true, but it is likewise true that there is no provision



in the constitution which debars a voluntary organization or other group of citizens from presenting their views to these officials.

The question of which side is right in the tax reduction issue is secondary to the larger issue of the rights of citizens.

This government is still "of, by and for the people."

### Cutting Down Over- Production



"Representatives of producers of industrial alcohol agree to restrict production."

"Committee to cooperate with Government in devising federal legislation for conservation of oil."

Three random items of news from one periodical. The menace of over-production hovers over natural resources as well as manufacturers. But at what point will producers who agree to control production meet the law?

### Seeking a Way to Give



IF IT is more blessed to give than to receive, it is also perhaps more difficult.

When a rich man gave a large sum to a museum, one who was well acquainted with him remarked:

"I don't think he was moved so much by desire to spread the knowledge of art and science as by a wish to find a convenient shelf on which to lay a part of a burden that was growing too great."

"What would you do if you had a million dollars?" is a question which has set on foot much idle conversation.

"What would you do if you had to give away a million dollars?" may not be an easy question to answer.

Albert Lasker, advertising agent, has tackled the problem of giving away a million and has devoted that amount to research into the diseases of middle age, the so-called degenerative diseases. Dr. F. C. McLean, head of the Medical Department of the University of Chicago, which will administer the gift, points out that, while the new-born child has a far greater expectation of life than the child of a century ago, the man of fifty cannot expect to live longer than did the man who reached fifty in 1828. Heart disease claims increasing thousands. Modern life puts greater strain on the kidneys and arteries of the man at fifty. An instance, perhaps, of well-directed giving.

### Our Shrinking National Debt



CONGRESS provided in 1919 for the retirement of the public debt by requiring that there be placed in the budget each year a certain amount for a sinking fund.

In addition to this amount all payments of principals on foreign debts must be applied against the debt, as must all interest paid by foreign governments on their debts. There are certain other minor items which have been used regularly for this purpose. In 1927 the figure placed for debt retirement was \$519,000,000. In 1928 it will be \$536,000,000. In 1929 it will be \$541,000,000. The national debt on June 30, 1927, was approximately \$18,500,000,000. In fourteen years the debt will be reduced to \$11,000,000,000, approxi-

mately the amount owed to this country by foreign governments.

Therefore, in less than a generation the people of the United States will have paid off that portion of the war debt due directly to our participation in the war, leaving for the next generation the question of whether we shall collect from Europe the balance of the money owed us or cancel these obligations and undertake to pay them off ourselves by taxation. Certainly, twenty-four years is a short enough time to pay for our participation in the great war. Our neighbor, Canada, figures on taking three times as long to pay off her war debt. It is a little more than one-third of the time we have given foreign countries to pay their debt to us. In view of these facts it hardly seems justifiable that there should be taken from the taxpayers of this country additional amounts of money for the purpose of more rapidly retiring the national debt.

### Congress and Public Utilities



THAT CONGRESS should order some investigation of the public utilities industry in this country is more than likely. That such an inquiry would produce proof of great wrong doing is unlikely, as it is unlikely that it would lead to any radical departures from this country's traditional policy of private ownership as the best means for public service.

It is interesting to recall that in the face of constantly rising prices in many other industries the price of electricity has gone steadily down. It is worth recalling, also, that the industry as a whole shows in its earnings no indication of unfair profits.

But more to the point is the fact that the industry found itself at the close of the war with high prices for what it bought and regulated prices for what it sold, and has met that condition not by clamoring for higher rates so much as by increasing production efficiency and widening markets.

The attitude of American business toward the public utility and private ownership has been well stated by President Lewis E. Pierson of the National Chamber:

"The National Chamber has an established policy which has already been declared and which has been considered by the membership to be so important that it has been reiterated. This is the position that the government should scrupulously refrain from entering any phase of business which can be successfully undertaken and conducted by private enterprise."

### Railroad Labor And the Law



IN MANY instances the boards of arbitration under the new railroad labor law worked successfully last year. However, in one case, that of the Western firemen, there has been a hitch and an appeal to the courts.

The railroads are accused by the Brotherhood of Locomotive Firemen and Engineers of bad faith, and that accusation has been echoed by some newspapers. Here is the situation:

The firemen on the western railroads asked an increase of wages, and a board of arbitration consisting of six members was chosen, two of them named by the firemen, two by the railroads, and two by the Board of Mediation in Washington. The six met, considered the application for increases, and were unable to agree. A



statement of that inability was filed with the authorities on December 5, 1927. Later the firemen representatives asked the chairman, Judge H. P. Burke of Denver, to recall the board.

To this the railroad members objected, declaring that the Board of Arbitration had ended its existence when it failed to agree. With this point of view, Chairman Burke had agreed, but, "on the opinion of the Department of Justice and the Board of Mediation to the contrary," decided to call a new meeting of the Board of Arbitration in order that any action by the arbitrators might be passed on by the federal courts.

Four members of the board met, the railroad representatives being absent, and granted increases in pay. The decision was filed with the U. S. District Court, and counsel for the railroads have protested. The decision of the court will settle a mooted point as to whether a board which once has agreed to disagree can be reconvened and can function with one party to the controversy unrepresented.

To ask a judicial settlement of that question hardly seems "an act of bad faith."

### Italy Makes the Lira Stable



basis, and this stabilization on a gold basis of nineteen lire to the dollar is of importance not alone in Italy but in world economy.

For Italy it means an end to the sentimental dream of many Italians who would favor an active policy of attempting to bring the lira back to its pre-war gold par of about five to the dollar. It means the end of a period of ten years of fluctuating exchanges for a country that is so dependent upon foreign supplies that every movement of the quotations had an influence upon her internal price level.

The worst of Italy's post-war economic crisis was passed in 1921. Italy thereafter made steady economic improvement until the painful policy was abruptly adopted in 1926 of attempting to change from a depreciating to an appreciating currency. This brought some important trade declines, readjustment of values, and uncertainties.

Through stabilization of wholesale and retail prices and wages, improvement may reasonably be expected without grave dislocation of industry. Money that may have sought refuge elsewhere should return and savings increase. There should be an improvement in business profits which decreased during the revalorization crisis. Wages, which were somewhat reduced, should strengthen, and unemployment, which has somewhat in-

**I**TALY is a notable addition to the list of some eighteen countries that since the war have officially stabilized their currencies upon a gold



And Down They Go

creased, should be lessened. The shortage of liquid funds should pass in time.

For the world the recent move has considerable significance. It registers further progress in clearing up the wrecks of unstable paper money, and is especially interesting because of the small amount of gold credits necessary. It is another demonstration that firm control of public debt, sound budgetary practices, and a strict limit on the amount of paper money are more immediately important factors than the gold situation. It means further stability of exchange and prices which contributes to the restoration of orderly commerce and trade.

### A Mountain And Two Mice



**T**WO LONG investigations by the Federal Trade Commission, one on bread and flour and the other on electrical equipment, have been ended and the results made public. Not a cry of outrage has come from the lips of a public presumably outraged by a bread trust and an electric trust. In the electric industry there was competition; in the bread business there was a "trend toward consolidation" but "the commission found that competition was keen."

Both inquiries were in answer to Senate resolutions; both have lasted over a period of years; both have cost large sums of public money; both have cost far larger sums of money to the industries affected. And all for what?



# The Map of the Nation's Business

By FRANK GREENE

Managing Editor, Bradstreet's

**T**HE revival apparent in early December in a few lines, notably in the automobile and iron and steel industries, made further progress as the month advanced. Cotton goods joined in, not so much because of new buying as because of reports of curtailment in manufacture which stiffened quotations in the face of a decline in the raw material. The raw material in turn grew stronger with the strength in cotton goods.

Cold weather and seasonal buying combined to stimulate retail purchasing, although the month's results indicated that the chains, the mail-order houses, and the department stores moved in the order named, well ahead of smaller dealers in the volume of gain.

The distinct departure in the automobile trade was not confined to Ford, who had been changing both models and plants.

## Steel Shows Gain

**T**HE iron and steel trade, described as scraping bottom in November, also noted expansion in buying, some of this by automobile manufacturers but more by railroads, who purchased cars, rails and locomotives. Structural material was also bought, and implement manufacturers continued to take liberally because of a good past season's sales.

Some of the other important happenings of the month were a record-breaking total of sales of stocks, consequent new high record totals of bank clearings and bank debits, a very slight rise in the general price index number, reduced totals of December failures and liabilities as compared with a year ago, and a rise in call money rates to the year's peak of 5½ per cent.

While the improvement shown in the automobile and iron and steel industries was influential in keying up business, the trend in most industries in December was toward reduced activities, and wholesale trade made merely nominal response to the enlarged retail business. The latter, aided or retarded by varying weather conditions in different parts of the country, sent varied reports. Final returns will be needed to determine accurately the gains over 1926. The sea-

son of annual reviews once more brings forcibly to reviewers and readers alike the feeling that in many ways mid-winter, with its purely artificial changes, is not so well adapted to the production of coherent retrospects and forecasts as early spring, when man and nature alike

in the reflection in its failure returns of the heavy liquidation resulting from burst real estate booms, disastrously low cotton prices, short spring wheat yields and the bank suspensions inherited from 1926 or earlier years. In addition, 1927 had its own troubles from the sharp

contrasts between early indicated and final yields of leading grain crops; the swift uprush of cotton prices following realization of the immense damage done by the Mississippi flood; the keen competition in trade and industry, which found reflection in the greatest crop of consolidations and mergers probably ever recorded and in a reduction of factory employment in the closing months to a point not equalled since the summer of 1924.

## The Year's Failures

**T**HE year's failures, it may be added, about equalled the average of the seven years from 1921 to 1927, while the liabilities were slightly above the annual average for the same period. Considerably more than half of both were, however, a direct inheritance from 1926 or earlier.

In bank clearings new high record totals were scored, but practically one-half of the cities showed decreases from 1926, and one-half of these decreases were in turn almost directly due to the low price of cotton in the first half of the year or to reduced banking transactions growing out of deflated booms. Price index numbers—generally—went down in the first half of the year but advanced in the second half, largely because of the bulge in the prices of farm products which was caused by

the unfavorable spring and summer weather.

Some notable price changes were the approximate doubling of cotton between January and October, with a 15 per cent decline later; the advance of beef cattle by 20 per cent to the highest level in seven years, a result, lessened receipts indicate, of actual scarcity; a 25 per cent advance in corn prices; and a 20 per cent drop in prices of hogs.

The sharp changes in prices of grain were complicated, perhaps aided, by the reduction of speculative interest in grain markets, this attributable to superior at-

## BUSINESS INDICATORS

Latest month of 1927 and the same month of 1926 and 1925 compared with the same month of 1924

Production and Mill Consumption	Latest Month Available	Same Month 1924 = 100		
		1927	1926	1925
Pig Iron.....	Dec.	91	104	110
Steel Ingots.....	Dec.	88	97	111
Copper—Mine (U. S.).....	Nov.	99	110	99
Zinc—Primary.....	Nov.	115	129	119
Coal—Bituminous.....	Dec.*	88	125	114
Petroleum.....	Dec.*	132	126	107
Electrical Energy.....	Nov.	135	128	114
Cotton Consumption.....	Nov.	126	118	110
Automobiles.....	Nov.	59	114	163
Rubber Tires.....	Oct.	92	99	87
Cement—Portland.....	Nov.	110	108	104
<b>Construction</b>				
Contracts Awarded (36 States) Dollar Values.....	Dec.	142	159	156
Contracts Awarded (36 States) Square Feet.....	Dec.	114	115	140
<b>Labor</b>				
Factory Employment (U. S.)—F. R. B.....	Nov.	97	103	105
Factory Payroll (U. S.)—F. R. B.....	Nov.	100	108	111
Wages—Per Capita (N. Y.).....	Nov.	104	105	104
<b>Transportation</b>				
Freight Car Loadings.....	Dec.*	94	106	105
Gross Operating Revenues.....	Nov.	100	111	105
Net Operating Income.....	Nov.	93	123	115
<b>Trade—Domestic</b>				
Bank Debts—New York City.....	Dec.*	140	119	111
Bank Debts—Outside.....	Dec.*	119	112	110
Business Failures—Number.....	Dec.	106	101	92
Business Failures—Liabilities.....	Dec.	113	101	81
Department Store Sales—F. R. B.....	Nov.	111	111	103
Five and Ten Cent Store Sales—4 Chains.....	Nov.	133	124	111
Mail Order House Sales—2 Houses.....	Dec.	128	115	115
Wholesale Trade—F. R. B.....	Nov.	98	102	102
<b>Trade—Foreign</b>				
Exports.....	Nov.	93	97	91
Imports.....	Nov.	117	126	127
<b>Finance</b>				
Stock Prices—20 Industrials.....	Dec.	174	139	135
Stock Prices—20 Railroads.....	Dec.	144	123	113
Number of Shares Traded In.....	Dec.	138	97	101
Bond Prices—40 Bonds.....	Dec.	109	106	102
Value of Bonds Sold.....	Dec.	74	83	68
New Corporate Capital Issues (Domestic).....	Dec.	231	97	121
Interest Rates—Commercial Paper, 4-6 months.....	Dec.	111	123	123
<b>Wholesale Prices</b>				
U. S. Bureau of Labor Statistics.....	Nov.	97	99	105
Bradstreet's.....	Dec.	97	92	101
Dun's.....	Dec.	95	93	97
<b>Retail Purchasing Power, July, 1914 = 100.</b>				
		July, 1914 = 100		
		Nov.	Dec.	Nov.
Purchasing Power of the Retail Dollar.....		1927	1926	1925
Purchasing Power of the Clothing Dollar.....		61	60	58
Purchasing Power of the Food Dollar.....		59	58	57
Purchasing Power of the Rent Dollar.....		64	62	60
Purchasing Power of the Rent Dollar.....		60	58	56

\*Preliminary.  
Prepared for Nation's Business by the Statistical Dept., Western Electric Company, Inc.

are putting forth new seasonal efforts.

The year 1927, more truly perhaps than some others, was the heir of the mistakes or excesses of its predecessors, though it furnished its own quota of unseasonable weather, disastrous floods, uncertain crops, irregular trade, industrial reactions, tremendous stock speculation, continued money ease, alternately heavy gold imports and exports, and a soft coal strike that early raised and later lowered the car-loading barometer with effects considered serious by some observers. How 1927 bore the burdens of earlier years is illustrated best perhaps



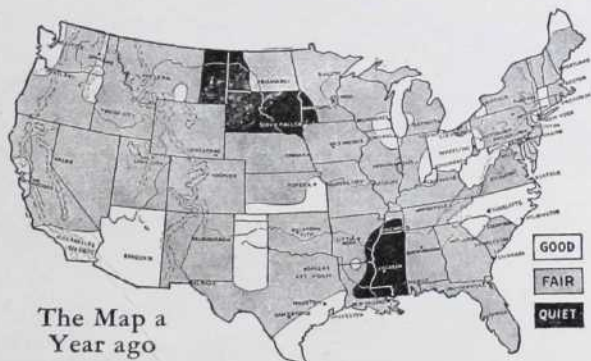


tractions in the stock market, to changes in market methods or men, or to increased regulation of grain dealings by state or national governments.

Space will not permit detailed mention of the directions in which 1927 movements ebbed and flowed. The year was one of abundant activity and excellent returns in financial and investment circles and of renewed hopefulness in agriculture and its kindred lines after a half year of discouragement. Activity ebbed in many lines of wholesale trade and "heavy" industry, but the slump was lightened by the rally in the closing month in two of the "heaviest" lines, iron and steel and automobiles.

It was a year of continued progress in chain store and mail order sales. Department store distribution was about the same as in 1926, but the "statistically submerged" smaller retail traders, it is generally conceded, had a "lean year."

The following table shows the percentage changes (D for decrease and I for increase) in the production of some of the country's leading industries in 1927 as compared with the preceding year, also the changes in some of the other important lines known as "barometers of trade":



**T**HE year 1927 saw much repression in final distribution as well as in production. The vacuum created may be filled in the present year with profit to those who are able successfully to meet the competition.

#### INDUSTRIAL PRODUCTION

	Change, per cent
Steel .....	D 8.3
Iron .....	D 7.2
Iron ore .....	D 9.0
Automobiles .....	D 21.0
Building permits .....	D 10.9
Lumber .....	D 8.7
Cement .....	I 4.3
Plate glass .....	D 14.4
Locomotives .....	D 54.6
Freight cars .....	D 7
Anthracite coal .....	D 4.4
Bituminous coal .....	D 9.3
Crude petroleum .....	I 17.4
Gasoline .....	I 10.9
Shoes .....	I 7.9
Rubber tires .....	I 1.7
Cigarettes .....	I 8.7
Electric power .....	I 8.0
Rubber consumption .....	I 1.7
Silk consumption .....	I 9.9
Cotton consumption .....	I 13.0

#### MEASURES OF TRADE, FINANCE, ETC.

	Change, per cent
Department store trade .....	I 2
Chain store sales .....	I 12.1
Mail order sales .....	I 4.9
Bank clearings .....	I 6.0
Stock sales .....	I 28.4
Bond sales .....	I 9.6
Failures .....	I 1.2
Liabilities .....	D 1
Employment .....	D 3.1
Gross railway earnings .....	D 3.3
Net railway earnings .....	D 10.7
Car loadings .....	D 2.5

The general trade and industrial situation as 1928 enters has what may be termed a silver lining, in the form of a general feeling that 1927 saw much repression in final distribution as well as in industrial production and that the vacuum thus created may be filled in the current year with profit to those who are able to meet successfully the competition which after all abides generally in all trade and industry.





### "The Spirit of Chicago"

*An etching by Anton Schutz*

TWIN TOWERS that show the beauty of a modern business section in Chicago. Both are monuments to business made big from little things. On the right is the Tribune Tower, built from the newspaper penny; on the left, the Wrigley Building, product of the chewing gum nickel.

Mr. Schutz is visiting other American cities for future etchings to appear in Nation's Business.



# EIGHTY YEARS OF GOLD

By JOHN HAYS HAMMOND

## *From California to Capetown Mr. Hammond Has Sought for Gold*

**A**S A YOUNG man, working for the U. S. Geological Survey, I went up into Eldorado County, in California, in 1880, and hunted out James Marshall, then a decrepit old man, who had, thirty-two years earlier, picked up a few nuggets in a millrace and started the greatest gold rush of all time.

The old gentleman took me to the very spot, then quite deserted, where he had found those tiny magnets that had the power to draw uncounted hordes of venturesome men across a trackless continent. It was this call of gold that had led my father west, and it was due to James Marshall that I had been born in a straggling village called San Francisco seven years after his discovery.

When Marshall showed me just where he had found this gold I got a pick and a pan, washed out some of this mother gravel, and succeeded in finding a little nugget worth about a dollar which I had worked into the wedding ring of the wife whom I was a little later to marry. It was a sentimental souvenir of the birthplace of gold.

This find of James Marshall's is important because it started the great trek westward. It led to the prospecting of all the west and the general development which followed. In historical magnitude, however, it has always seemed to me that even this was a minor result when measured beside another which has quite dominated the age in which we have lived and made it what it is.

### Indians Dug It, Too

**M**ARSHALL'S discovery initiated the era of outpouring of gold which gave the world its first abundance of money. Upon that money largely has been built an immeasurable expansion of its industrial activities. That expansion has been the dominant element of the time, quite overshadowing all else. But for the outpouring of gold that began with Marshall it would have come much more slowly. I am inclined to believe that this opening of the gold flood gates has had more effect upon the times in which we live than has any other event.

HE HAS seen the annual yield go from about ten million dollars to four hundred millions. He has been the friend of presidents and statesmen. He was sentenced to die and escaped with a \$125,000 fine.

Here is the first of several articles telling of his experiences which he has promised to contribute to NATION'S BUSINESS.—*The Editor*

How long before 1849 gold was known in California no one knows. In the early days I knew a Jesuit priest of the Mission of San Francisco who had labored for the conversion of the Indians long before that year. He said that they had often brought nuggets of gold to the missions. The purpose of the Jesuits was to convert the Indians. They said nothing of their knowledge of the presence of gold because that information would have quite upset their missionary plans.

### Discovery Was Opportune

**I**T IS interesting to surmise what might have happened had the presence of gold in California become known ten or twenty years earlier. If the discovery had antedated the Mexican War which led to our acquisition of California, there might have been keen competition for its possession. The British, for example, might have set up a claim to the region and could have been depended upon to make an efficient endeavor to establish it. It was fortunate, from the standpoint of the United States, that the existence of gold in the west remained unknown as long as it did.

I have spent most of my life getting gold out of the ground. As a small boy I went into the mountains where Chinamen were working low-grade placers and panned out my first traces of the yellow metal. I grew up almost under the shadow of the Mother Lode of California, 300 miles long and nestling gold mines all the way. Some of those mines are now taking out the precious metal from 4,500 feet underground.

Geologists estimate that the erosion of time has worn away 6,000 feet of quartz

ridges that once protruded above the present surface. The gravels of those erosions have washed down the streams of the Sierras, bearing their gold with them, have strewn it along their courses, have dropped the finer particles of it at the edge of the plain when the strength of their rush has been checked. It has been to accumulations of this kind that dredging has been applied.

After I had wandered all over the world as a mining engineer I came back to California and organized a dredging enterprise to work the gravel of one of these streams. It was the Yuba River, which brings down from the Sierras the sweepings from the gold-bearing veins of its drainage area. We built, under the direction of W. P. Hammon, huge dredges that brought up gravel from unprecedented depths. We took out tens of millions in gold.

I went into the Grass Valley region of the Sierras, farther north, and took part in the organization of such splendid quartz mining enterprises as that of the Northern Star and Empire mines, still producing today from depths as great as 6,500 feet. I saw the Comstock mine in Nevada pour forth gold and silver in its magnificence—\$400,000,000 worth of it in forty years, and I have seen the deserted mining camps of that commonwealth bleaching like buffalo bones on the plains. I have seen the Homestake Mine in the Black Hills of South Dakota produce abundantly for the span of a lifetime and then give recurring evidences of remaining vigor.

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### Gold From El Oro

**I**T FELL to my lot to have to do with the development of the El Oro district down near Mexico City, the richest gold region of the sister republic whose mineral wealth has always been based chiefly on its silver. In Colombia, South America, companies with which I have been identified have dredged for gold and got results that have not been often equalled on that continent.

And, most fascinating of all, as well as most productive, is South Africa, which enters the story a little later.

No more interesting theme has ever



presented itself than that of gold, man's pursuit of it through the ages, its rise to dominance through these last eighty years, and speculation as to its behavior for the future.

It was the first metal that primitive man the world around ever came to prize and to work. This came about, doubtless, because it was found pure and free in nature, and because it is ever a thing of beauty. Aboriginal man, finding a nugget of gold in a stream, may have kept it because it was different from other pebbles and because it was pretty. Then one day he put it on one stone and hit it with another. It did not shatter as did those other pebbles, but flattened out. This savage found that it could be worked into various forms. Loving ornaments, he began to make them of gold, and to search for more gold.

The working of gold was among the earliest arts. Kings in the dawn of history accumulated their hoards of gold, and other kings made war on them to capture it. To Egyptians, Jews, Greeks, Romans, Aztecs, it was the symbol of that which was most precious.

### Too Precious for Money

**B**UT gold was rare, a thing not for the masses but fabricated into rich vessels and hoarded by prince and potentate. It was far too precious to serve as money in the hands of the multitude. First copper and then silver performed this service of the workaday world.

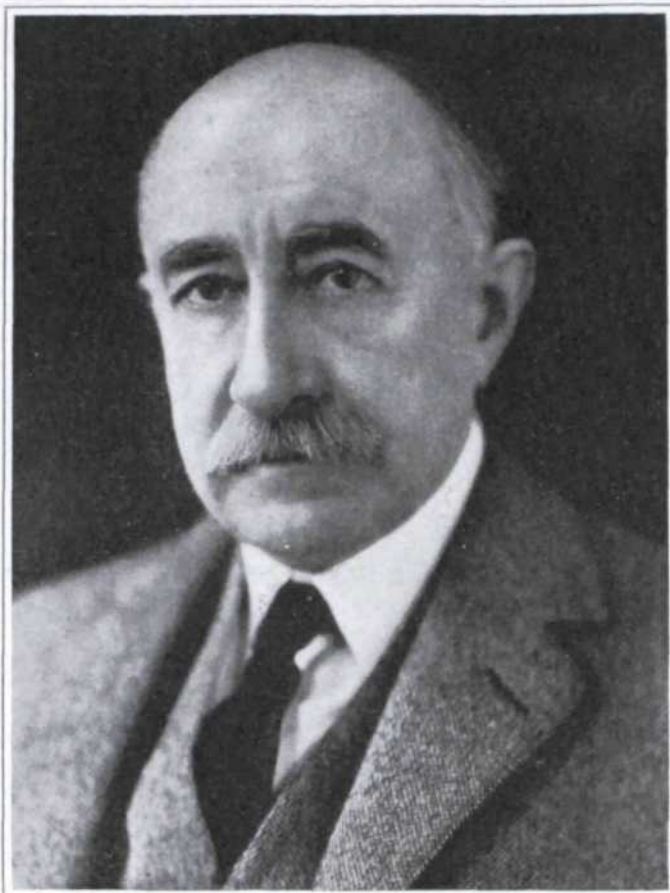
Money was in fact silver for 2,000 years before James Marshall got to prowling about millraces. His discoveries inaugurated a warfare of the metals which lasted fifty years and ended in the dethronement of the white and the crowning of the yellow metal.

The fact that gold was a mere incident in the world and of no fundamental importance a hundred years ago may be grasped when it is shown that the annual production during the early years of the nineteenth century amounted to but some \$10,000,000. The paucity of these figures is shown by comparing them with one item a hundred years later—that of an annual gold production of \$400,000,000.

California from 1849 on inaugurated the first great era of gold production on the quantity basis. Three-fourths of it was placer gold washed from the gravel along the beds of streams. The gold hunger spread to other states north and east. People from all over the world came to the Pacific Coast, and many of them added to the actual production of

the yellow metal. Then early in the fifties two miners in Australia scraped up 3 pounds of gold in a single day. The two biggest nuggets ever found were shortly afterward picked up in another Australian stream. They weighed nearly 200 pounds each. There was another wild rush toward this island continent, whose production soon began to affect the world yield.

An unprecedented condition arose.



John Hays Hammond, first to propose deep-level mining. At his suggestion Cecil Rhodes sold his outcrop claims and took a chance on sinking shafts to the lower levels. The profit was \$10,000,000 in the first two years

By 1860 the world was producing \$134,000,000 worth of gold a year which had declined to \$90,000,000 in 1874.

There was enough of the yellow metal so that considerable volumes of it were finding their way into the currencies of nations. Those nations were learning how to put the yellow metal away and issue certificates against it, redeemable in it, that were the handiest money yet devised by man. Thus came the nineties.

### The New Era in Mining

**I**T HAPPENED that I was to be in at the birth of another great event in the era of outpouring of gold. I was in South Africa, far from my native California, the mother of gold. I had gone there for Barney Barnato, spectacular mine operator, to manage and develop his gold properties.

I had not been long in South Africa before I saw the possibilities that lay in

deep level mining. Most of the mining up to that time had been confined to shallow workings on the outcropping reefs. I proposed to sink shafts that would tap the pay strata at a depth of 2,000 to 3,000 feet. The operation would be expensive, but the returns almost limitless.

Barnato was so occupied with other matters that he failed to act upon my recommendations, whereupon I resigned.

Soon afterward I entered the employ of Cecil Rhodes, developer of South Africa and the most remarkable man I have ever known, and became immersed in his many enterprises.

### A Camp-fire Conference

**O**NE night we were in camp — Rhodes, Dr. Jameson, who was later to lead a historic raid that bore his name, and I—far up in the wilds of Mashonaland, and talking over a campfire. I laid before Rhodes my theory of deep levels as the source of the great permanent wealth of the Rand. I advised that he sell his outcrop claims which were then bringing high prices and buy up the land further back which covered the deep level area and which was comparatively cheap.

Although there were many millions of dollars involved, Rhodes decided then and there by the campfire to take my advice. He dispatched a messenger in the middle of the night to ride post haste 500 miles to the nearest cable station with instructions to his London directors to sell their entire holdings in outcropping companies. This was done. It provided the millions necessary for sinking to the deep levels.

We did not wait until ore was found to put up our mills. Our confidence was such and Rhodes' gameness was such that mills went up as the shafts went down. So fast did we work that, at the end of two years, we had cleaned up a profit of \$10,000,000. The basis for the greatest yield of gold that has ever been known to any field since time began was laid. South Africa was made dominant in the gold market of the world. Year by year she had produced one-half of the gold of the world.

The story of gold through the years that followed the development of deep level mining in South Africa was one of stupendously increased production in which that region played the master rôle. In a few years the annual production of the world increased from \$100,000,000 to \$200,000,000, to \$300,000,000, to \$400,000,000. As much gold was being taken out in a single year as had



existed in the hands of man a hundred years earlier. The story of the accelerated outpouring can best be told by the figures of production.

1890....\$118,848,700	1913....\$460,497,204
1892.... 146,651,500	1914.... 439,029,702
1894.... 181,175,600	1915.... 468,724,918
1896.... 202,251,600	1916.... 454,176,500
1898.... 286,879,700	1917.... 419,422,100
1900.... 254,576,300	1918.... 380,924,500
1902.... 296,737,600	1919.... 365,788,800
1904.... 347,377,200	1920.... 337,019,300
1906.... 402,503,000	1921.... 330,378,800
1908.... 442,476,900	1922.... 319,420,100
1909.... 454,059,100	1923.... 367,853,400
1910.... 455,239,100	1924.... 393,460,800
1911.... 461,939,700	1925.... 395,968,000
1912.... 466,136,100	1926.... 398,557,400

As circumstances worked themselves out, I played a part in another of the wonder stories of gold, there in the South African wastes. Rhodesia, far back in the interior, then almost untouched by white man, overrun by numerous black tribes, was one of the least known lands in the world. Yet when we explored it in 1894 we found in abundance the indelible marks of a civilization that had once thrived there. Strange to say, this civilization had been based on the very thing in which we were most interested—on gold mining.

In Southern Rhodesia we found excavations following veins of gold-bearing quartz which, if strung together would reach a thousand miles. The mining was altogether in open cuts and had obviously been done with little machinery and no explosives. The method had been that of clearing the dirt away from the hard quartz veins, building fires against them, and shattering them by throwing water on them while they were hot.

### An Ancient Civilization

FROM this region of great ancient gold mines we followed well-worn trails that led eastward through Portuguese East Africa and down to the sea at what is now Sofala. Naturally we were curious as to the identity of the peoples who had labored here and, through the years, patched together the evidence which led us to a very definite conclusion.

There were the remains of many fortresses along the road from Sofala to the mines. Ruined towns were numerous, and many of them had boasted ambitious buildings, including temples. The most important was the Great Zimbabwe in southern Mashonaland, with its fortresses, and temples, leaving such evidences as crucibles that have come down through the centuries unchanged.

We compared our evidence gathered

on the spot with known history. There was the conspicuous fact in gold history that the Queen of Sheba who dwelt in Arabia had visited Jerusalem in King Solomon's day, something like 1,000 years before Christ, and had at different times made him presents of gold. One of these gifts is set down as having been 120 talents of gold or about 1,000 pounds of the then very rare, precious metal.

It is known that Solomon, in association with his friend, King Hiram of Tyre, a Phoenician monarch, had later made himself independent of the gold of the Queen of Sheba by organizing expeditions and developing his own mines.

The story from the African end is tied

to the Biblical record by a study of the remaining ruins and implements found on the ground. They are of the Sabaeans who were the Arabians ruled by the Queen of Sheba, and of the Jews, and of the Phoenicians, all kindred Semitic stock. These were the people who worked the ancient South African mines. This Southern Rhodesia was the Biblical Land of Ophir. These were King Solomon's mines.

### The Truth of Wild Guesses

BEFORE we had solved this riddle Rider Haggard's novel, "King Solomon's Mines," had appeared. He located those mines here in Southern Rhodesia. I wrote him a letter asking how he had known they were here even before we had known it.

He answered that he had not known it but had placed them here because, in the absence of information about the region, nobody would be able successfully to contradict him.

"Thus," he said, "imagination precedes reality." We rejuvenated King Solomon's Mines. They have been producing around \$20,000,000 in gold a year, which is more than Mexico yields, more than all the rest of Latin America combined yields, more than Australia yields, as much as is produced by California and Colorado taken together.

Until the present generation the world has always been short of money. Nations, with all their trying, have never found but one way to provide stable money. They must base it on a metal that has an established value. They may make the money itself out of that metal or they may put the metal in a treasure vault and issue paper to represent it. The paper is good only

(Continued on page 57)



This shows how Hammond got his start. He panned his first "color" with two Chinese placer miners

Hammond on the trail in Mexico. The trail for him has led over the mountains of four continents



(ILLUSTRATIONS FROM MR. HAMMOND'S PRIVATE COLLECTION)



# A Plea for More Government Regulation

By JULIUS KAHN

President, Truscon Steel Company

**W**HAT is the matter with business? Everyone asks the question and every answer is different.

We are accustomed to think in terms of economics taught us at school; the theories of supply and demand, available money in circulation, balance of trade, the influence of politics, protective tariff and free trade, waves of prosperity and depression, and goodness knows what else. But our theories drop by the wayside when they meet the actualities of life. Our statisticians prophesy waves of prosperity, and their prophesies are followed by demoralization in the price of securities; their recommendations of caution find prices of securities climbing higher than ever.

From time to time the business cycle is rolled out and we are told that depressions must always follow periods of prosperity. Is it necessary that there be depression at all? I maintain that it is not. There is so much to do that our industries rightfully might run at top speed year in and year out and never meet the demand.

## Why Depression at All?

**A**S LONG as a single highway consists of dirt, a single building is incommensurate with the needs of the crowd that passes by, a single individual wears shabby clothes or fails to satisfy his needs, so long should business prosper. Men want to work, and we have plenty to do and plenty to do with.

Our unrest comes principally from the want of proper guidance, resulting in improper distribution of wealth, unequal opportunity for all, discrimination, unequitable compensation, unfairness of competition. Suppose an industrial head has a large factory, plenty of capital, plenty of good machinery, a suitable outlet for all that he produces. But he works his factory in periodic spells of rush and idleness, his men live properly for six months and idle for the other six; for six months he employs 100,000 men and the other six he reduces the organization to 10,000. What would we say of such a manager? Is he an opportunist, or is he a broad-minded human executive, entitled to the guardianship of the welfare of 100,000 workmen?

Who is the guardian of the nation's industry? Our Government, the greatest government in the world—and yet with all its greatness, the most erring. Per-



haps its very greatness makes it subject to equal greatness of error. The Government must assume the trusteeship of our welfare, and we, its citizens, must interest ourselves in the appointment of men who know how to run our Government. The Government can help business and hold the reins steadily. Ups and downs and irregularity of progress are signs of improper management.

I do not wish to be understood as preaching Socialism or Communism. I believe business must at all times remain in the hands of the people themselves. Competition must exist and individual effort must be rewarded. But I do also believe that there is one body that can guide us all and keep a fatherly eye over all, and that body must be our Government.

## Wield Big Stick Kindly

**E**VERY solution to the problems of bad business I feel must emanate from a guiding, central authority—namely, our Government—and I do not believe it is inconsistent or impossible, with the powers given to that Government that they so legislate and regulate business that there be no ups and downs, periods of unusual prosperity and depression, just as it has been made possible to regulate against financial depressions and panics through a central body, our Federal Reserve Board.

Recently, I read an article in *NATION'S BUSINESS* by one of our important, western industrialists on what is ailing busi-

ness. The writer blamed the lack of honesty and the unscrupulousness of the purchasing agent. To him, the whole solution lay in the ethical guidance of the purchasing clerk.

To me that seems absurd. The purchasing agent is just doing his everyday duty in buying just as cheaply as he knows how. Conditions are such that he has learned to use every trick available to deceive or mislead the seller.

## How Prices Are Pulled Down

**I** HAVE seen cases where purchasing agents have deliberately printed letterheads of rival companies, made up fictitious propositions, forged the names of competitors, changed dates, changed figures, anything to deceive the seller, to urge him to lower his figure. I was advised only recently regarding the workings of a certain modern, so-called very successful purchasing agent. It may be interesting to tell the story.

A very important railroad had let a contract to a contracting company. It had asked this company to meet the price quoted by the lowest bidder and thereby reduce its own figure by some \$90,000. It advised him in so doing that if any minor changes were needed in the specifications to reduce the cost the railroad would gladly concede the changes. Thereupon, the contractor employed a purchasing agent with a reputation for shrewdness. One of his very first acts was to set a number of steel bidders against each other. One of his first suc-



cesses was in inducing an important national steel company to reduce its figure by \$91,000. He took one trade at a time and by the usual methods, legal according to modern society rules, he manipulated the subcontracts until he had made a saving which at the time I write amounted to \$250,000.

One instance of his methods will illustrate my point, and I am using another trade than that really involved. The original low figure on plumbing and heating combined was \$118,000, which allowed a reasonable amount for material, labor, overhead and profit. The subcontractor was eager to get the job, willing in fact to take the work at cost with only a small amount for overhead and no profit. He was hammered down to \$90,000 under the impression that he was being allowed to meet a competitor's figures and to gratify the railroad's desire that he get the contract. At this point, he was asked to divide the figure into plumbing and heating and he divided them arbitrarily, \$55,000 for one, \$35,000 for the other. The nearest competitive figures which the purchasing agent had for plumbing was \$42,000 and for heating \$57,000.

He then went to the low man on heating, the \$57,000 bidder, and worked the play in about this fashion.

#### Bad Ethics or Good Business?

"YOU, of course, realize that you are not low and that I have many figures that are lower than yours. But the railway wants you to have the job and I am willing to let you meet the low figure. Here is a combined figure on plumbing and heating of \$90,000 (and he shows him the written offer). Here, also, is my lowest bid on plumbing alone (and he shows him the \$42,000 bid).

"If you will take the heating job for \$48,000, that is your competitor's combined figure of \$90,000, less my figure on plumbing, the job is yours."

The contractor swallowed the argument, took the contract at \$48,000, cutting his figure \$9,000, bitter at his competitor who was supposed to have put in a figure of \$48,000, which was below cost to a point where a friendly discussion between competi-

tors was absolutely impossible. The purchasing agent then turned to the heating contractor and offered him the heating job at \$35,000, the amount he had allowed in his reduced combined bid. He intended to make the combined purchase for \$48,000 plus \$35,000 or \$83,000, for what was actually worth \$118,000.

He was not successful with the heating contractor who turned down the offer. I don't know at this moment at what price the purchasing agent actually placed the heating contract.

But what is the use of the industrialist worrying and heaping all bitterness on the purchasing agent? The contractor who employed the purchasing agent thought all of this was shrewdness, the railroad considered it clever buying, although a little judgment should have convinced so important an institution that it can only be successful if the factories on its line are successful.

#### Inconsistent Advertising.

THE railroad spends hundreds of thousands of dollars in advertising to induce industries to locate on its lines. A single page, one insertion in the *Saturday Evening Post* costs \$8,000. But the railroad is not as a rule willing to spend \$1,000 in the way of a preferred price to hold business when the industry is once secured.

Again, what is the use of blaming a purchasing agent for the wrecks he leaves in his trail? That is his job. There are hundreds—yes, thousands—of companies that have been literally wrecked by the keen purchasing agents of some of our automobile companies.



"What is the matter with Business?  
Everyone asks the question"

What, then, is the matter with business? Shall we blame the purchasing agent? How useless. Shall we listen while the banking economist sits back in his chair and says: "Business is bad because there is overproduction and the law of supply and demand necessitates low selling prices and ruinous profits."

I say there need be no overproduction. There need be no low demand and there need be no low selling prices. I do not blame the purchasing agent. He is doing what is expected of him, using methods perfectly legal, methods recognized as shrewd and clever by the majority.

#### How Valuable Is Competition?

THERE is something the matter with business—I think something decidedly the matter with it—but it isn't the purchaser, it isn't the public, it isn't supply and demand and it isn't freedom or lack of freedom of capital.

A very important and, I believe, a principal cause lies with the men who run our Government, State and Federal; the men of our own choosing, the supposedly practical men we send down to Congress. Competition sharpens our wits; it strengthens our mental fibre, it creates the solid substance. Incidentally, however, when misapplied, it also kills. Warfare is competition in its keenest form, and we cannot justify war because it primes a nation to its greatest activity, produces wealth, skill, brings forth our greatest men. The success achieved isn't worth the price.

Is it necessary because competition sharpens our wits, that one man should crush another, that might should make right, that the strong should hold down the weak? Is there not plenty of room for all?

In this country you can use almost any means for buying that you desire. You can combine companies and form all of the purchasing trusts you desire.

#### Sellers Can't Combine

BUT THE seller cannot combine, he must not even speak to his competitor as to prices to be quoted. We have laws and a very active Department of Justice which will tell you that freedom of competition must be sustained, that there must be no action on the part of the seller involving in any manner a restraint of trade. There must be no relationship of sellers tending towards any fixity of price.

Our Supreme Court has ruled that the sellers can associate with their competitors for the purpose of disseminating information as to the quality of the products of the industry, creating general interest to exploit these products, cost of manufacture, etc. They



can discuss past transactions so long as the discussion does not fix a future price. But let them get together to protect themselves against an unscrupulous buyer, let them establish and try to maintain a fair price with a reasonable margin of profit, and the law steps in and tells them there must be free and unrestrained competition and any act tending towards stabilization through an agreement on prices, reasonable or unreasonable, is unlawful.

### Dickering in Purchases

UNDER present custom, the seller disposing of his product deals with unknown conditions. He has no right to know what his competitor will quote and, in consequence, a rivalry of wits exists between himself in the endeavor to get the best possible price, and the buyer who works for the lowest price. In consequence, the majority of business is reduced to cheap, Oriental dickering. The motives of the buyer and seller are diametrically apart. Competition helps the buyer and he uses it for all that it is worth while the seller gives just as little as he dares.

The amusing part of it all lies in the fact that when the Government deals with a business, it absolutely insists upon a selling price control.

Take our railroads, dominated by an Interstate Commerce Commission. Are they permitted to get together and fix values? In fact, they must do so and are not permitted to cut rates, give rebates, offer advantages other than those of good service, to gain their trade. They must do what other lines of business are not permitted to do. Passenger and freight rates are fixed, conditions of operation are established and every move is scrutinized so that one railroad may not be killed by another.

### Are Stable Prices Ideal?

HOW ABOUT public utilities controlled by our State and Federal Governments? Of course, their rates are fixed to allow them a reasonable margin for labor, overhead, insurance and capital invested.

How about our government-owned steamship lines? Does the Government charge the same as the other steamship companies for ocean freight and travel? Of course it does.

Could the Government operate a single industry without such protection? Of course it could not.

How about industry in times of war when we need it working at its very best? Will ruthless competition at such times speed it on? No. As a matter of fact, the Government actually fixed prices on the major required products during the recent war.

And again, with the privilege of reasonable

price fixing properly controlled, is the stimulus to return value received, taken away? Of course not. What competition remains to give ample stimulus to our railroads and public utilities? The competition of good service. There is plenty of room for competition without the ever-grinding cutting of prices below the legitimate margin. Unrestrained price competition is ruinous. It is competition uncontrolled and run wild. It is the result of a law, universally applied, without heart or soul, whether applicable or non-applicable.

I insist that our present laws covering restraint of trade have long ago outlived their usefulness and should be modified. They were enacted at a time when there was good cause, when unscrupulous capitalists endeavored to monopolize the trade of the United States through combinations which threatened to become so large as to be a public menace. Conditions were so bad that something had to be done, and the Sherman Act was the outcome.

But any universal remedy may be worse than the disease and it may also outlive its usefulness and require modification.

### Advice and Aid from Government

WE NEED government regulation in industry. I do not mean by this that we need government operation of business. But we do need government direction to prevent the abuse of good business and to establish sound business principles; an industrial or trade commission consisting of a free, thinking, technical, liberally-minded body that seeks to help through analysed, deliberate judgment.

I do not mean that the Government should run our business. But I do mean that business should be allowed the greatest possible latitude, consistent with proper service to the public, guided by governmental authority and not hindered by a Sherman Act, when the results that business strives for are wholesome. The Government should be the greatest possible benefactor to business. It should stimulate peace, not discord.

The manufacturer has a sufficiently big problem on his hands to keep up with competition created

by the universal desire for progress. With the competition of foreign enterprises where labor receives from 10 to 25 per cent of our wages, where cartels and combinations are encouraged, we need all the assistance that can possibly be given without the legal restraint which prevents us from maintaining a reasonable selling price and an ample working margin.

### The Case of Steel

AT THE present moment we can import certain forms of steel from Belgium or Germany to Pittsburgh, Pa., the heart of our steel industry; pay ocean freight, insurance, duty, landing charges, freight from Atlantic coast points to Pittsburgh, place the material in the yard of the mills themselves, cheaper than the American mills can afford to sell it. Steel in most forms can be landed, freight, insurance, and duty paid at almost any American port, Atlantic or Pacific, at seven or eight dollars per ton cheaper than the lowest selling price of our American mills. And with it all our American mills are almost in a state of panic because of their low profits.

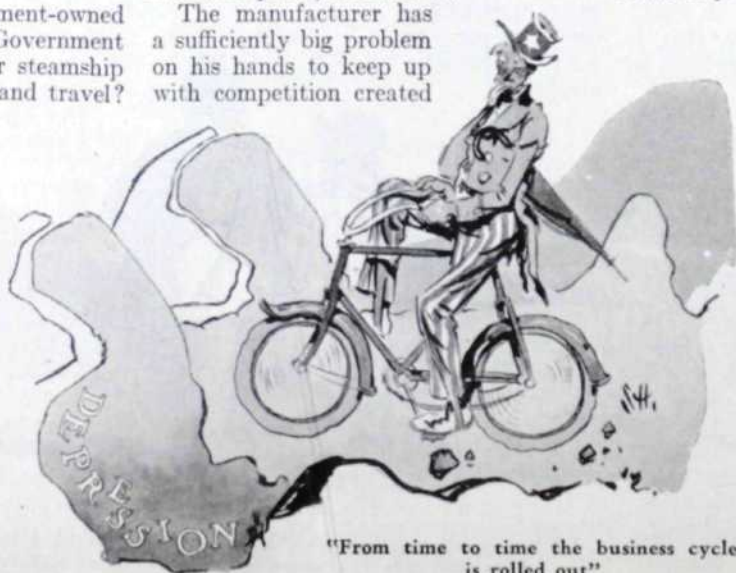
What shall we do, cut wages, because steel production is all wages? It would be a crime against humanity. Shall we scrap our plants and replace them with more up-to-date mills? We have done it for the past twenty-five years and find each new installation about ready for scrapping because of the frantic endeavor to lower costs with later machine development before it is actually completed. We can compete for a while by paying labor six dollars a day when our competitor pays a dollar or a dollar and a quarter, but we can't put it over forever.

### Give Business Cooperation

THE REAL trouble with business isn't lack of wealth, overproduction and lack of demand. It is not entirely foreign competition. It isn't an overextension of credit and it is not a shortness of ready money. Give the American business man a chance. Give him the confidence and cooperation of the public. Make it possible to earn the assistance of

labor. Stimulate his genius for research and invention with a reasonable profit. Place before him inducements for further development of our natural resources. Make achievement a worthy aim, not accumulation, oppression and deceit. Urge him to respect and help our Government and its laws. Do not put forward restrictions which encourage efforts to develop means of evading them.

We need more of a constructive, scientifically trained body of men such as the Federal Trade Commission or Department of Commerce.





# The Machine Back of the Machine

By BERTON BRALEY

*In Collaboration with E. P. Blanchard of the Bullard Machine Company*

Illustrations by Cesare

Romance once rode in a coat of mail  
As a cavalier blithe and bold,  
Who fought for a maid with lance and blade  
On the field of the Cloth of Gold.

Today romance wears a coat and pants  
And carries no flashing sword,  
But uses his skill with a lathe or drill  
Or works at a draughting-board.

Oh, a workaday wight is the modern knight  
(Or that is the way he seems)  
Yet he works in the midst  
of more romances  
Than the knights of old in  
their maddest fancies  
Or their strangest and  
wildest dreams.

A KNIGHT in full armor is a glamorous and romantic figure. A machinist in overalls running a turret lathe is—well, a machinist in overalls running a turret lathe.

The poet who wrote:

"A primrose by a river's brim  
A yellow primrose was to him  
And it was nothing more,"

would very likely look at the mechanic and the turret lathe and say, "I see a workman and a piece of machinery. What of it?"

And the workman, meeting Lancelot in glittering panoply, lance in rest, sword in sheath, the plumes of his helmet nodding to his great charger's stride, would probably observe, "Who's the guy in the sheet iron suit?"

Of course the workman's point of view would be mistaken, but not nearly so askew as that of the poet. A knight was something very much more than a guy in a sheet iron suit; he was a symbol of a high tradition and of a splendid ideal.

## A Saga of Steel

AND the workman driving a turret lathe is a symbol of a tradition and an ideal so much greater than knight-hood that he should be sung in a saga of steel; of men and steel, of men who dress in steel and think in steel and work in steel; and whose dreams and thought and work are fundamentally as fine and unselfish and beautiful as were those of

Galahad, Lancelot or Chevalier Bayard.

For, from its beginnings, those in the machine tool industry have toiled to release men from toil. They have served to free men from servitude. And for every slave they have liberated, every human being they have freed from the serfdom of exhausting, back-breaking, heart-wearying toil, they have created hundreds of slaves in his place—mighty, tireless, unflagging slaves—machines.

plied our forces a thousandfold, but we don't need a thousand times as much to eat.

Now back of the dynamos, the motors, the turbines, the steam engines which generate this enormous power; back of the machines which use this power, is the machine tool—the machine that builds machines or, as some sloganeer put it, "The Master Tool of Industry."

Despite their importance not much is said or sung about the men who plan and make these master tools. I'm trying here to gather together a few of the materials for that saga of the machine tool and its makers, but it's hard to make them lyric. Reamers, planes, milling machines and turret lathes don't fit too well into meter; and machine-tool makers are rather inarticulate about their own craft. The saga of the industry should be sung by someone whose pulses beat in time to the thud of stamps and the screech of drills and the growl of enormous planers, the moaning of metal in labor with new products a-borning, by someone who can translate these into terms of romance as thrilling as the "Idylls of the King"—or Kipling's "McAndrew's Hymn."

## Accuracy, Not Poetry

THESE machine-tool makers think in terms of efficiency, accuracy and economy—three of the least poetical words in

the English language.

Their craft is a craft which figures things to thousandths of an inch; a craft which must make a lathe capable of shearing three-quarters of an inch at a turn of a steel axle, but delicate enough also to peel a ten-thousandth of an inch off that same axle; a craft which must estimate economy of operation and efficiency down to the decimal places; a craft where the imagination and ingenuity are devoted, not to publicity problems, but to creating, as a part of the day's work, new machine tools to make new machines as new needs arise.

Machine-tool builders have been doing this ever since machines have been made,



"Man hadn't been directing natural forces to his benefit"

Someone has figured that the mechanical power now used—far too high, I think, even at 900—in the United States is equivalent to the toil of nine hundred human servants in each household. (Perhaps the figures were nine thousand—I'm not sure—and it doesn't matter much, because nine hundred is enough for our purposes.) Assuming only twenty million households in the United States, we should require eighteen billion slaves to do the work. And we should all die very quickly from overcrowding and lack of food. Machines have multi-



and none of them ever got very rich at it. There may be a few machine-tool multi-millionaires, but I don't recall any offhand. And they have been short on glory, too.

Everybody has heard of James Watt, who invented the steam engine in 1765. But very few people seem to have heard of John Wilkinson. I hadn't, until I talked with Mr. Blanchard.

Yet John Wilkinson's boring machine, practically the first modern machine tool, made it possible for Watt's steam engine to be produced.

For Watt's engine remained in the working model stage ten years, because cylinders bored by hand couldn't be made tight enough to hold steam under pressure. The mechanic of those days thought he was doing splendidly when the diameter of a 6-inch cylinder varied  $\frac{3}{4}$  of an inch here and there.

Watt packed these hand-bored cylinders with wool, with cotton, with bagging and everything else he could think of, but still more steam leaked out around the piston heads than was left to push them. His full-sized engines simply wouldn't work.

But in 1775 Wilkinson designed his mechanical boring machine, which could shave a cylinder close enough to hold steam. And thereupon Watt's engine became a practical commercial product and not merely a miniature model.

The Master Tool of Industry seems about right, doesn't it? But historians of industry have been giving Watt all the glory and leaving Wilkinson out of it.

This seems to be a sort of agreed practice among historians. They've told us all about Fulton and his invention of the steamboat, but they have usually neglected to mention how James Nasmyth made the big swift modern steamship possible. So to 99 per cent of you who read this article the following facts will be new. Hear ye, hear ye!

### Unknown, Forgotten Inventor

IN 1839 it was planned to build *The Great Britain*, the largest side-wheel steamer of its time. The paddle shaft was to be 30 inches in diameter. But there wasn't any means of forging a shaft of such unprecedented size.

James Nasmyth was a machine-tool designer. He sat down at the drafting board and designed (invented, some people call it) the first steam hammer, so that the paddle shaft of the *Great Britain* could be forged.

That particular shaft never was made, because the vessel wasn't built. But the hammer was ready, and it later forged many an even larger shaft. A Master Tool of Industry! Yet I'd never heard of Mr. Nasmyth, either, until Mr. Blanchard told me about him.

Everybody knows that Eli Whitney invented the cotton gin—a machine with which one operator could seed as much cotton as 28,000 hand laborers—but he didn't make money out of it. Later, however, he *did* make a little money by designing machine tools so accurate and

efficient that for the first time it was possible to make firearms in large numbers with interchangeable, standardized parts. He was, in other words, the father of modern standardization and the grand uncle of mass production; two systems which would be impossible but for the machine tool.

In losing money on a machine and making it on a machine tool, Whitney reversed the usual situation. For, as hereinbefore noted, machine-tool makers don't often get rich. The average machine-tool maker thinks business is booming when he can earn 7 per cent on his capital, and trade good if he manages to pay wages and salaries—including his own. If machine-tool makers were primarily commercial, they'd shift to some business that uses their products, and the only way to account for their staying machine-tool makers is that they love the work of designing, creating, and producing something that makes man's power greater as his toil grows less.

### New Tools Grow Old Quickly

FOR though the basic tools in the industry were all invented between 1775 and 1850, the development and improvement in those tools has never ceased. This progress is so incessant and so cumulative that no really modern industry in America uses machine tools whose de-

sign is more than ten years old. And every machine-tool maker, big or little, who hopes to survive must be a creator, an innovator, and to some extent an inventor. He must not only be ready to make machines that make the machines of today, but prepared to make machines that will produce the machines of tomorrow. And he's been doing that since 1775, and will continue to be doing it until the stars grow cold—after which he will probably begin manufacturing tools to make the latest thing in star-heaters.

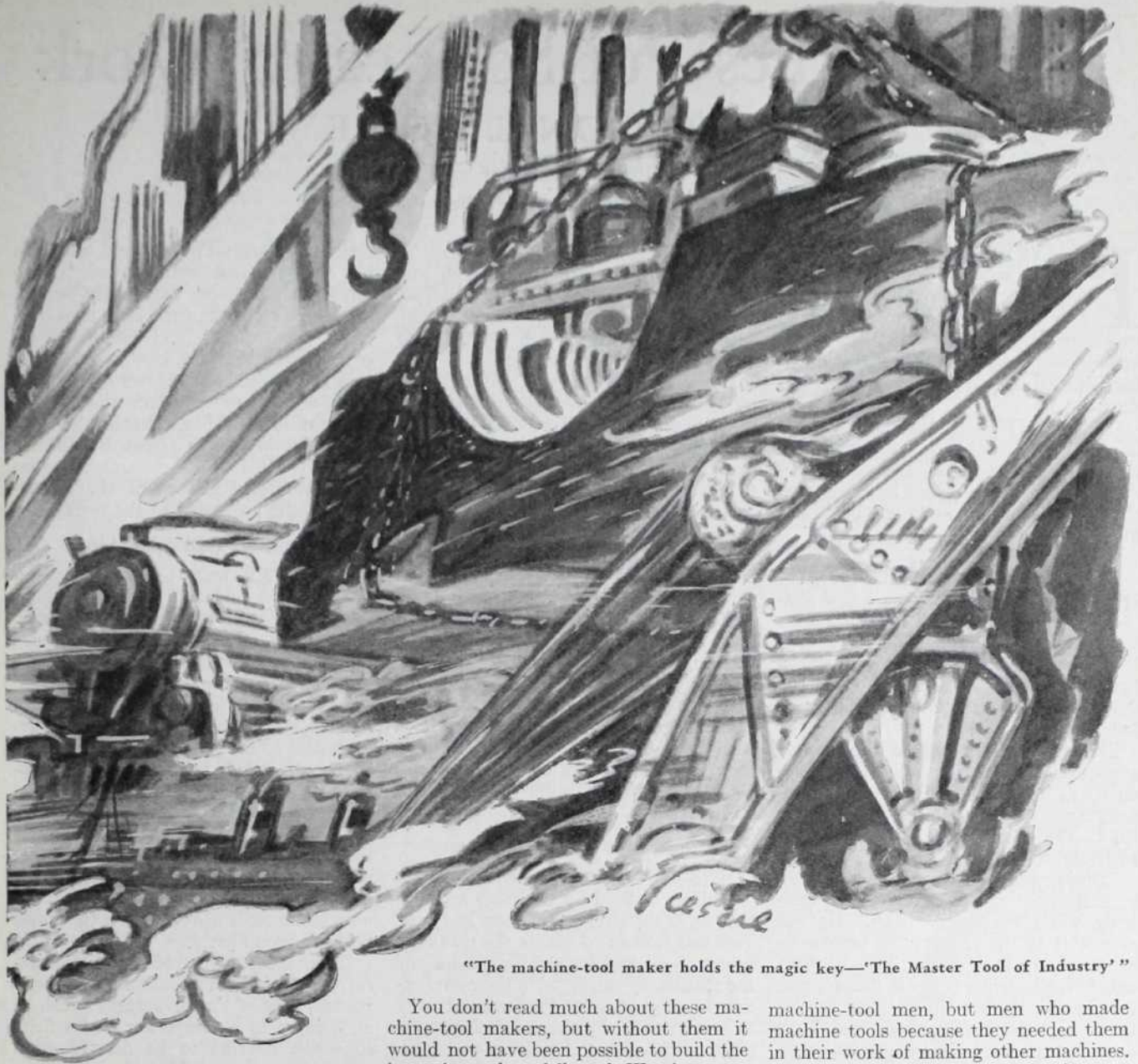
### Nature as a Servant

WHY seven or eight thousand years of so-called civilization elapsed before man really began to use the forces of nature mechanically is something the philosophers might be able to explain—a layman can't. But it's a fact that, except for the water-wheel and sails, man hadn't been directing natural forces to his own benefit until Watt invented the steam engine and Wilkinson built the boring machine which enabled that engine to be manufactured.

But from the date of Wilkinson's borer, 1775, until today, the develop-







"The machine-tool maker holds the magic key—'The Master Tool of Industry' "

ment of the machine and the machine tool has been unbelievably swift and almost entirely synchronous.

Henry Maudslay invented several modern locks soon after Wilkinson's borer was created and Maudslay created the slide-rest lathe to manufacture those locks. Bramah invented the hydraulic press to shape heavy steel and iron by one operation; Brunel built block and tackle for the British Admiralty and designed a series of machine tools to turn out the blocks in quantity. Joseph Clement improved the slide lathe, invented the metal planer, and a screw-thread machine which would produce accurate and standardized screw threads. Matt Murray, James Fox, Richard Roberts, Joseph Whitworth, William Fairbairn, J. G. Bodmer, Earl Brunel, all working at the latter end of the eighteenth century and the beginning of the nineteenth, invented, designed, improved, speeded up and altered machine tools of various sorts to fit the needs of every industry and every machine-inventor.

You don't read much about these machine-tool makers, but without them it would not have been possible to build the inventions that followed Watt's steam engine.

Without planers, reamers, milling machines, slide lathes, thread-cutting machines, stamps, steam hammers, and the little micrometer-caliper that can measure within a ten-thousandth of an inch (and sometimes a millionth), machinery as we know it today wouldn't have been built. Nor machinery as our grandfathers knew it, either.

#### Micrometers and Intricate Tools

SO MANY are the names of the men and the firms that carried on this work of the earlier machine-tool makers here and in England that there isn't room for them in the compass of this story. There was Ernest Beale with his micrometer, Whitney with his gun-making machinery, Samuel Colt, Con Conradson with his improvements in the turret and the vertical lathe, Browne and Sharpe with hundreds of small and great improvements in design and efficiency, Bullard, Smith and Wesson, Savage, many of them not primarily

machine-tool men, but men who made machine tools because they needed them in their work of making other machines.

Since 1850, according to the few authorities that seem available about this little-sung industry, there has been no new basic machine tool. But for all that, the changes in size, in accuracy, in automatic control, and more than anything else in *speed*, have been so tremendous that it all amounts to a revolution in shop methods and the means of production.

High-tension steel and other alloys came along about 1915 to jump the speed of machine-tool operation 100 per cent. Improved micrometers made measurements so exact that millions of parts could be produced to fit ten thousand times closer than "the paper on the wall." A rearrangement of emery or carborundum wheels known as the centerless grinder speeded up the grinding and polishing of working parts by more than 100 per cent.

It is a Saga, this machine-tool history. Thor's hammer was a toy compared to the great forging machines that can flatten out a 10-ton ingot or smash the crystal of your watch without bending the

(Continued on page 54)



# Trade Bodies Put Science to Work

By HARRISON E. HOWE

*Editor, Industrial and Engineering Chemistry*

Cartoons by Charles Forbell

**I**N DAYS now past or passing, when business was more intensely an affair of personal rivalry, when the new competition of materials and whole industries was not thought of or talked about, the head of a great industry startled his rivals by hiring two chemists.

One of the rivals headed for New York hunted up a friend with a knowledge of chemistry and chemists, and said:

"I understand So-and-so has hired two chemists. I want you to get busy and hire me four."

## Research Moulds Industries

**T**HE world of business has a new attitude towards research today. Industries have died overnight and new ones been born as a result of research; banks have officers whose work is to watch the development of science in its relation to industry.

There is nothing new in the idea of science as the maker and unmaker of industries. Twenty years ago Robert Kennedy Duncan, whose farsighted activity led to the establishment of the Mellon Institute, said:

"During the next five years the small manufacturer who is swept out of existence will often wonder why. He will ascribe it to the economy of large-scale operations or business intrigues or what not, never knowing that his disaster was due to the application of pure science that the trust organizations and large manufacturers are already beginning to appreciate."

Yes; but what of the small manufacturer who cannot go into the market and "buy four chemists?"

Shall he hope for help from the government? That is one answer; yet I doubt if it is the best one. Both Germany and Great Britain have done more, perhaps, than we have along these lines.

Germany's devotion to organized research led in part to the creation by

Great Britain of the Department of Scientific and Industrial Research and the appropriation of an initial million pounds to be expended, pound for pound, with the industries which set up their own research organizations.

But is there not another way out than by government action or even government assistance? Grant that the small manufacturer cannot develop his own research department; must he then turn to government? Is there no place for cooperation?

The answer is "yes," a hearty "yes."

The trade associations of the country have for years been doing intelligent and valuable scientific work. At least forty trade groups are engaged upon such programs, and these groups vary from a half dozen individual members to many hundreds, and spend from small amounts up to a million and more dollars annually. While, in general, trade associations have been formed for other activities, there are a few instances of such groups coming together originally for the pursuit of scientific work.

## Groups Want More Facts

**T**HIS has been the case where no machinery existed for desirable cooperation, as in the Crop Protection Institute. This was formed to enable the manufacturers of insecticides and fungicides and the machinery employed in their application to support some fundamental work to be carried on by the entomologist, the phytopathologist (who, it may be explained, is a gentleman who deals with plant diseases), and the chemist. Encouraging results have been secured, and the Institute is on a very substantial footing.

Occasionally a trade association has turned to science upon recognizing a common need for the fundamental data to be applied by the individual laboratories of the member firms. It is undoubtedly a fact that, to gain the greatest benefit from applied science, the in-

dividual manufacturer should establish his own research and control laboratories. \*A laboratory may easily become more important than the sales or advertising departments, and farsighted executives who have not hesitated to scrap a plant and rebuild machinery have done their utmost to maintain their scientific staff intact. For example, the Hadfield Steel Works in Great Britain are really attached to the research and control laboratory, instead of the laboratory's being appended to the works.

## Members Can't Act Alone

**H**OWEVER, many problems now confronting industry are so complex that their complete solution involves an expenditure of time and money which few, if any, individual manufacturers feel justified in spending. This is a natural consequence of the scientific progress of the day, where the accumulated basic information of the past two hundred years has been, and is being, intensively applied to modern methods of manufacture. Most of the easier things seem to have been done, or at any rate many of the steps next to be taken are impossible without additional fundamental knowledge, in the seeking of which the trade association finds a legal and a profitable field for group activity.

In engaging upon trade association research, the individual manufacturer surrenders none of the advantages which he may enjoy as a competitor in his field, since the benefits to be derived from the new truths established depend almost directly upon the ability of his own organization to apply to his own work the data thus secured.

Because the work is fundamental, competitors can freely unite, realizing that the data themselves do not alter





their relative position in the race for trade, this position being determined by the ability which they may have to put the information to work. Therefore, one

of the criteria for the success of a group undertaking scientific work is the selection of problems sufficiently fundamental to avoid a competitive spirit.

Many a group has begun its work with standardization, and of late they have been encouraged to do so by the results of the work on simplified practice promoted by the Department of Commerce.

Another logical starting point is in an information service, which, in addition to statistics, can provide abstracts of scientific literature. For example, an investigation of the number of journals which one interested in alloys would need to watch includes more than five hundred periodicals in many foreign languages, representing a task which no one corporation would undertake at the expense of its own stockholders, but a task that many interested in alloys could undertake in co-operation at moderate expense but of great profit to themselves.

The trade association can undoubtedly derive for its members many of the benefits

"Industries have died overnight and new ones been born as a result of research"

which come to the industry supporting its own laboratory, though perhaps not in the same degree. An industry on a scientific basis attracts better men; it broadens the executives; it actually makes the business more fascinating; it breeds confidence, diminishes or eliminates the unpleasant surprise factor; it enables new developments or new industries to become established; it frequently changes the character of an industry; and has been known to rescue them from receiverships. Various economies are effected. Trade wastes receive special consideration. Thanks to the humanizing of science which progresses encouragingly, there is a distinct public appeal in the fact that a particular industry or a group of industries has its foundations in scientific research.

### These Profit by Research.

OF THE many groups which have turned research to their profit and benefit, a few may be noted as examples. Some ten years ago the idea that research could be of benefit to the dyers and cleaners was planted in the minds of the association through an address before the annual meeting. The seed was slow to germinate, but today the modern plant which has been erected at Silver Spring, Md., indicates what can be done to help an industry composed, for the most part, of a large number of relatively small units. In the institute which the association has built for itself there will be carried on work which was initiated with a consulting chemical laboratory continued upon the fellowship plan at the Bureau of Standards, and now expanded to include a series of courses given to those who are either employed in or expecting to enter the dyeing and cleaning business.

In a like general field is the Laundry Owners' National Association, which was prompted to undertake scientific research that it might learn the truth concerning charges often made against commercial laundries and might correct such abuses as were found to exist.

One of the successful associations is the California Fruit Growers' Exchange, which is a cooperative, non-profit, non-capital stock corporation composed of more than twelve thousand growers. The research laboratory was organized primarily to develop methods for the

conversion of the lower grades of citrus fruits into such salable products as citric acid, oil of lemon, pectin, and the like.

The National Canners' Association is among the most successful of those engaged in group or trade association research. The fees for membership are one cent per case of canned goods manufactured, and in addition to the support of the secretary's office and the general machinery of the association, including needed advertising, the income so derived is devoted to informational and scientific research work.

The Underwriters' Laboratories in Chicago, with branches in other cities, has become a national institution, is maintained by the National Board of Fire Underwriters, and operated for service and not for profit.

The National Warm Air Heating and Ventilating Association conducts its research at the University of Illinois, while the Heating and Ventilating Engineers maintain a laboratory in cooperation with the Pittsburgh station of the Bureau of Mines. The Clay Products Association is interested in the furtherance of the use of drain tile, wall coping, segmental block for sewerage construction, flue linings, and similar clay products.

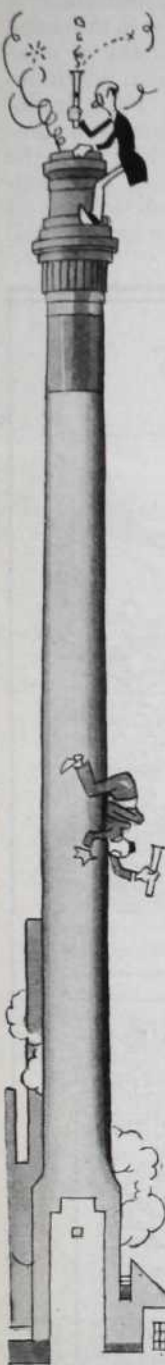
The American Gas Association conducts extensive research, as do the Paint and Varnish Manufacturers.

### Study of Light and Fertilize

MANY of the benefits which individuals enjoy from modern lighting are due to research and service work carried on by the National Electric Light Association. The National Fertilizer Association maintains a Soil Improvement Committee, which has established fellowships at several colleges, where research in connection with fertilization is carried on.

The Association of the Manufacturers of Chilled Car Wheels is another group that has done notable work, and the Tanners' Council of the United States of America, which includes nearly all the producers of various grades of leather, has established a notable laboratory at the University of Cincinnati, the results from which have earned it the enthusiastic support of the industry as a whole.

The National Wood Chemical Association, the Container Club, the National Society of Corrugated and Fiber Box Manufacturers, and the National Asso-





ciation of Cotton Manufacturers are other groups busy upon research.

The American Petroleum Institute has a number of fundamental researches in chemistry, physics, and geology under way on the group plan. Still another strong group is the Institute of American Meat Packers, which is actively engaged in fundamental research, in service to members, and in promoting an educational plan in cooperation with the University of Chicago. Indeed, the institute is expected to become an organization which shall combine research edu-

cation and similar activities of this sort.

The National Lumber Manufacturers' Association, the National Association of Macaroni Manufacturers, and the Southern Pine Association are still other groups interested, while no account would be complete without mention of the American Bureau of Welding.

All of the associations included in these worthy projects cannot here be mentioned, but it is worthy of note that for associations interested in research there are many facilities available.

Trade association research is not en-

tirely free from possible difficulties. Some causes of failure may be noted to advantage. First, we should list internal politics. Second, interference with the scientific director. Third, misfortune in the choice of the director or in the choice of problems. Fourth, inability of some members to apply the data, which results in discouragement. Fifth, inadequate support, due to failure to comprehend the difficulties involved and the size of the program laid out. And finally, impatience, which leads to lack of appreciation of the time factor involved.

## LOOKING AND LAUGHING AT BUSINESS



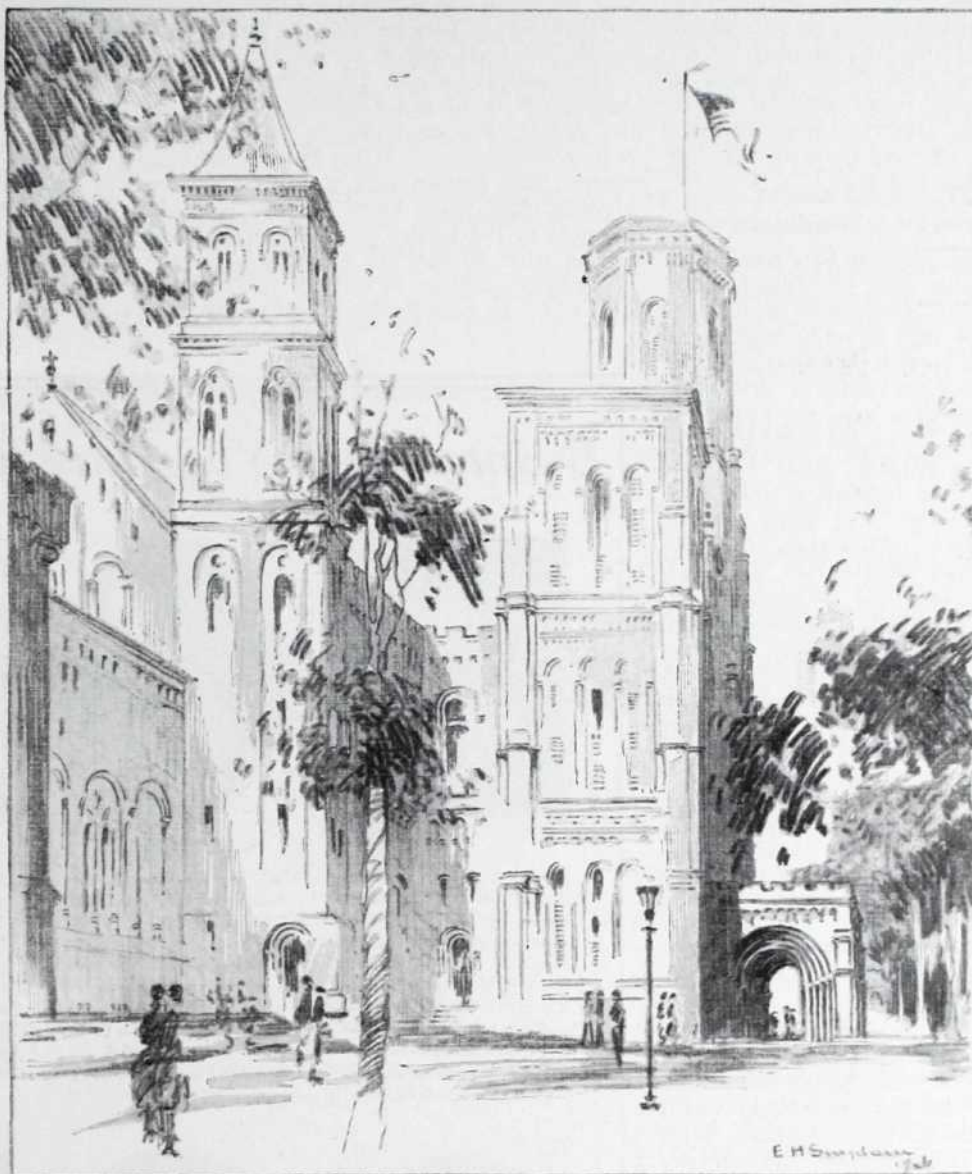


# A Storehouse of Business Helps

By RAYMOND WILLOUGHBY

The Smithsonian Institution, Washington, is a bequest of an Englishman, James Smithson, who had never seen America. It has become the center of various scientific bureaus of the Government

DRAWING BY  
E. H. SUYDAM



EVERYWHERE it is commonly observed that Applied Science rouses the public with her practical bell ringing, but Pure Science stands outside waiting for someone to ask her in. It was Chesterton who rated "science a thing on the outskirts of human life," a thing that has "nothing to do with the center of human life at all." But it is to the enduring benefit of mankind that another Englishman saw that the humanizing of knowledge waited only on its translation. A scientist in his own right, James Smithson had the rare vision and faith to entrust his fortune of \$550,000 to the United States "to found at Washington . . . an establishment for the increase and diffusion of knowledge among men." That bequest became available

in 1835, but not until 1846 did the Congress give it substance by organizing the Smithsonian Institution.

## United States the Trustee

THROUGH the plan approved for its administration, the United States became a continuing trustee for his benefaction. Representing the nation in application of the bequest is the Smithsonian Establishment, including the President and the members of his cabinet; and the Board of Regents, including the Chief Justice of the United States, the Vice-President, three senators, three representatives, and six citizens. Worldwide the donor intended the benefits of his bequest, and to that purpose a directing secretary and a staff of scientific specialists are provided. Permanently

invested, the principal now amounts to about \$1,200,000, a fund which yields about \$65,000 a year.

The most casual acquaintance with Smithsonian activities would assure that they could be all things to all men. For the man in business, the man in industry or trade, there is a present and vital significance in the Smithsonian's fact finding.

Were its researches to lapse, where would the dealers in hardwoods, in fruits, in drug, oil and cordage plants discover the locations and growth conditions of their sources of supply, particularly those in the countries to the south of us? Where would oil geologists learn to distinguish the microscopic fossils which serve as guides to oil-bearing strata? Where would fish experts identify the



food on which fish live, and so be able to determine the range of the fish? Where would the staffs of agricultural stations have identified unknown pests from abroad, and so be able to deal with them?

The basic information for the answers comes from men who spend their lives in systematically studying, describing and mapping the habitats of nature's infinite variety of plants and animals. Valuable as their reports may be to a restricted group, publication by private firms seldom would be profitable, and that breach the Smithsonian ably fills when its means permit.

### "Dry" Holes Eliminated

IT IS not necessary to be a centenarian to remember that Dr. Joseph Cushman's intensive probings of ocean muds disclosed the clue to oil-bearing sands. For years oil companies operating in the Southwest had lost money in "dry" holes. Surface indications were not fulfilled in drilling. The loss on one well sometimes amounted to \$60,000. That was pure waste, but pure research got the companies out of the "dry" holes. On the meager grant of \$600 a year, Dr. Cushman had been delving into the specimens of ocean muds incidentally collected by expeditions engaged in ocean studies. These muds revealed the same kinds of fossils brought up by the well bailers. The problem was to distinguish the varieties found in the "dry" holes and in the oil sands. Dr. Cushman found the marks. The companies have saved millions in unprofitable drilling. Charted and branded, the Smithsonian's collection of the telltale fossils is a dependable divining rod guaranteed by science.

### Directory of Varnish Gums

VARNISH gums are not always what they seem to native collectors. When they are not, it is usually the importer who loses. One company found a waste of 30 per cent in shipments from Mexico, but it did not know from which trees the desired product came. With the aid of the Smithsonian, the company was soon in position to specify the useful trees to the gum gatherers. Yet this testimonial to the value of botanical research seems superfluous at thought of the economic importance of plants and shrubs. In Mexico, for illustration. No mind could be barren of an industrial vision at mention of henequen fiber, palm oil, cabinet woods, cacao, rubber, drugs, fruits, logwood, indigo, and cochineal. To give permanence to that vision, the Smithsonian has published an authoritative description of all the known woody plants in Mexico, about 5,700 in all, together with their local names and concise accounts of their economic uses. So high is the rating of this work that the first two parts are now out of print and unobtainable.

Verdant with vegetation, Costa Rica invites the making of a similar catalog. Financed by Oakes Ames of Boston, a

Smithsonian expedition to the interior brought out 9,000 specimens of plant life. When they are identified and described, the existence of plants commercially useful will be made known. Then our importers can tell the difference between the worthless and the valuable.

Cemeteries everywhere bear witness that insects of one sort and another are no respecters of persons. But the Smithsonian has been helpful to the Bureau of Entomology of the Department of Agriculture in finding evidence for belief that there is something in setting a pest to catch a pest. When Mexico was overrun with grasshoppers, it was worth knowing that some kinds of flies lay maggots in the insides of grasshoppers. Boring from within, the maggots were in strategic position to end the plague. And when the bean beetle was advancing

northward to the Ohio, it was of paramount importance to know his pet parasite aversion. If we are to know our enemies in the plant and animal worlds, men of trained minds must be free to study those worlds. For not only do insects attack man; they also ravage flowers, trees, crops, and stored products. For riddance, we must look to the vigilant microscopes of science.

### The Weather Needs Fixing

ALWAYS a live topic of conversation and now a matter of front page news, the weather has not given up all its secrets to the forecasters. With the telescope the astronomer can sweep the whole surface of a planet, the sun or the moon, and compare his findings with his own observations made at other times. Not so with the weather man.

## Business Men You Have Read About



### STEEL MILLIONS

Myron C. Taylor, once described as "the man nobody knows," the new chairman of the Finance Committee of the United States Steel. Textile mills, railroads, banks, insurance companies—those figure prominently among his activities



### WHOLESALE

W. M. G. Howse, director of the National Chamber and one of the leading dry goods distributors of the Southwest, who will preside at the National Wholesaling Conference to be held in Washington, February 14 and 15



### HOME BUILDER

Marshall Field, III, although he lives in New York, is heir to a fortune that is associated with Chicago; in that city he is undertaking a great experiment in housing, to provide 3,000 rooms, and every one of them with outside light



### PAID IN FULL

Reuben H. Donnelly, Chicago printer of phone books, paid off nearly a million dollars of old debts on New Year's Day. A brokerage house of which he was a member failed. He paid in full, with interest



### ON THE GROUND

Anthony H. G. Fokker, who besides being a brilliant flyer is reported as about to build an airplane factory and has selected a site near Wheeling, West Virginia, for starting his new commercial enterprise



### FORESTRY

Everett G. Griggs, director of the National Chamber, who presided at its recent Forestry conference at Chicago and who is going to speak at the Western Divisional meeting at Honolulu, February 8 and 9



He must depend on observations made by others. World-wide observations have not been coordinated, and by that lack the science of meteorology has lagged.

How is the weather of America related to the weather of Asia, of Africa, of Europe? What periodic tides surge through the atmosphere? Where do these tides originate and how do they act? How is the weather influenced by solar heat, and by the spots visible on the sun? Academic these questions may seem, yet their answers would go far to solve the problem of long-range weather forecasting. A group of the world's foremost meteorologists is working toward the solution. In 1923, under the leadership of H. H. Clayton, an American, they began the collection of weather records from all parts of the world. With the aid of a grant from John A. Roe-  
 b

ling of New Jersey, the Smithsonian has published the results of their work. Included are data on rainfall, temperature, and pressure from 387 stations where observations have been made for long periods. Some go back to 1764.

### From Optics to Indians

IN OTHER fields the Smithsonian has been equally helpful. It was Dr. Abbott who gave the Army a much-needed optical prescription for the instruments used in the World War. And it was Dr. Hrdlicka who provided the government with the information to end the celebrated White Earth litigation among the Indians. His ability to distinguish between the full bloods and the mixed bloods recovered more than a million dollars in land and money for the full bloods, and made good their title to

thousands of acres. Knowledge of the world's food resources is on a broader basis for the study of ocean forms of life, and naval constructors can cope better with the devastating marine borders because of the Smithsonian's patient delving.

Of workaday use to the engineer are the comprehensive compilations of mathematical and physical data and formulae. For the Institution no mineral was born to blush unseen. Useful or useless, it gets a name and a character—the first step toward commercial utilization or rejection. Does a pestiferous plant or bug get going in this country, the Smithsonian scientists likely can show up its turpitude. To its scientists it was not strange that something more than water should be needed to nourish pearl-making mussels west of the Mississippi. Stocking the streams with mussels did no good until the fish it parasitizes was supplied.

In all America there is no parallel to the Smithsonian's collections of specimens. Only the exhibits of the British Museum are comparable. With this pre-eminent resource must be included the library of 700,000 volumes. In several branches of science the world has acknowledged the leadership of Abbott, Wetmore, Miller, Hrdlicka, and Stejneger. Nor will his countrymen forget that it was Samuel Pierpont Langley, third secretary of the Smithsonian, who "rescued aviation from ridicule."

### Public, Yet Individual

FREE from the exigencies of government and yet distinguished with a public character, the Institution usefully capitalizes the prestige of its official recognition and at the same time achieves a remarkable mobility of its resources. Nowhere is there any foundation quite like it. Not a government bureau, it can use the franking privilege and keep its great store of books under the roof of the Congressional Library. It competes with no one. It interferes with no one. It cooperates with all. It tries to reach the basic problems of mankind. It seeks to provide the information through which they can be solved. These distinctions are projections of Smithsonian's belief that "no ignorance is probably without loss to man, no error without evil."

From the beginning, the Smithsonian has been a fact-finding and a fact-distributing workshop. Henry, the first secretary, was quick to see that the discovery of facts was the outstanding service the Institution could do. Their application would follow, he reasoned, once they were known. The laws of aviation and the why of plant distribution were interests typical of his concern. A spark of his productive fervor shines in his interest to make the staff "the cavalry of science." Broad and flexible were the guiding principles he established. Problems were to be investigated irrespective of their apparent economic value; no promising branch of

## In the Passing News of the Month



\$5,000,000

That sum is to be spent by the Battelle Institute of Industrial Research and Gerald Wendt, formerly a dean of sciences at Pennsylvania State College, and also a contributor to *Nation's Business*, is to head the Institute



BUSINESS, TOO

George Horace Lorimer, who has so successfully edited the *Saturday Evening Post*, is now also a vice-president of the Curtis Publishing Company. He had varied commercial experience before becoming an editor



STILL A PRESIDENT

Melvin A. Traylor, who was president of the American Bankers' Association, and is now president of the United States Golf Association. Besides that, he also has a regular job, serving as president of several banks in Chicago and St. Louis



PALS FIRST

Frank A. Seiberling, rubber man, who was financed in starting his own firm by an old friend, Edgar B. Davis, an oil promoter. He had lent Davis money when Davis needed it. Each refuses to accept any interest



CHAIRMAN

No one could quite speak of J. P. Morgan as succeeding anyone except as he succeeded his father as head of a banking house, but at least he is to sit in the late Judge Gary's chair at future meetings of the Steel Board



AT WORK AGAIN

Frank A. Vanderlip, who retired from the presidency of the National City Bank some years ago, is now a partner in a banking house. But he's had a good many unofficial jobs of importance to business since then



knowledge should be excluded; activities effectively directed by other establishments should not be undertaken. In his mind, the Smithsonian figured as a leader in investigation and not as a ceremonious caretaker of collections. Bachelors and doctors of science he had, but janitors of science he wanted none.

### It Helps All Science

ORIGINAL investigations and helpful participation in scientific expeditions have become the rule for the Smithsonian. And from its slender income it has drawn decisive aid for monumental researches. Who could mistake the vital quality of Schumann's work in bringing the ultra-violet rays to the service of medicine? Or Morley's notable contri-

bution to chemical measurement through his determination of the atomic weights of hydrogen and oxygen? Or Michelson's determination of the standard meter in wave lengths? Smithsonian publications now go to fifteen hundred libraries throughout the world. Through its International Exchanges it collects scientific literature from other lands, and to their libraries and societies it sends a million scientific publications from American presses. Freely the Smithsonian will loan its research experts, provide lecture courses and specimens, share its instruments, and answer questions to the limit of its lore. To government departments it is an active and able counsellor. Does a struggling society need aid for publishing a worthy scientific treatise, the

Smithsonian observes its charter to see that the world's knowledge is increased. For expeditions originating outside its walls it performs the useful service of obtaining foreign recognition.

Magnetic in its attraction of American men of science, it is the headquarters for the American Association for the Advancement of Science, the American Association of Museums, and, until 1924, for the National Academy of Science. Not by chance has its work enlisted a practical promotion from the heads of the Rockefeller Foundation, the Carnegie Institution, the American Museum of Natural History, and the Massachusetts Institute of Technology. Accredited as the meeting house and the clear-

(Continued on page 60)

## Eat, Drink and Spend—and Be Rich

By WILLIAM FEATHER

A YOUNG advertising man and I were having lunch and I commented on a couple of articles he had written for advertising journals.

"I have an idea I expect to work up into an article if I ever find time to gather the facts," he said. "It's about distribution. You know people say there's a lot of waste in the modern methods of distribution. Well, I hope to prove that this waste is a good thing. If we cut out the waste, think of the people who would be thrown out of jobs, thereby reducing the purchasing power of the nation!"

Instantly my mind reverted to my college economics of twenty years ago and I recalled the ancient story of the glazier who attempted to prove that small boys who broke windows with stones and baseballs were public benefactors because they indirectly furnished employment to menders.

I repeated this story, emphasizing the absurdity of such reasoning. As I talked my enthusiasm for the subject increased, and I asked my young friend why, if his logic was sound, another Chicago fire, a San Francisco earthquake, or a Mississippi flood, would not be a blessing.

But he was unconvinced. He thought a fire might be desirable.

Hoping forever to rid his mind of such nonsense, I asked him to imagine himself living on an island with five other people.

"You receive no supplies from the outside," I explained. "You are entirely self-supporting. Now, in this

situation, can you conceive of a fire being other than a catastrophe? Would you and your friends be better employed rebuilding your dwelling or making, let us say, a dam to run a water wheel?"

His answer was that modern social and economic organization is so complex that first principles are no longer effective.

I might have gone ahead with my argument, but I was halted by the recollection that Messrs. Foster and Catchings of the Pollak Foundation for Economic Research have taken violent exception to the old-fashioned economics. Having read "Profits," "Business Without a Buyer" and "The Dilemma of Thrift," I realized that the young man had authority on his side, even if he was unaware of it.

So, in order that he might remember me as a widely-read person if not a good economist, I explained that Messrs. Foster and Catchings had excited the professors and even the business men by showing that thrift when overdone stops production, since without consumption there can be no production.

"The new theory," I stated, "holds that we should junk our automobiles every other year, have our hair cut twice a week, order twice as much as we can eat, and light a fresh cigar after the tenth puff. In this way everyone will be assured of full-time employment at high wages, and all will be very happy, prosperous, and merry."

I conceded, therefore, that his original contention that waste in distribution is desirable might be a

sound thesis in view of the New Knowledge.

By this time both of us were tired of the discussion, and we went back to work. But I have been unable to clear my mind of doubts.

This notion that by spending and consuming we can make ourselves rich doesn't seem reasonable, despite the number of good thinkers who have accepted it.

Perhaps I can point up my perplexity by an example.

Let us assume that a maid in my home has, by hard work and thrift, earned and saved \$1,000. She asks me to invest it for her, and I, being a New Thought economist, say to her: "What are you saving money for? Don't you realize that will save yourself out of a job? Invest \$1,000? We have more houses, more apartments, more factories, and more machinery now than we can use. Men are out of work because people aren't consuming enough. I'll tell you frankly that unless my business picks up we'll have to let you go. If you're sensible you'll buy no bonds with your money. You'll go out and get yourself a fur coat, two evening gowns, a new hat, and a Japanese kimono!"

If that advice isn't sound, what's wrong with it? What's wrong with the young advertising man's idea that waste in distribution is desirable?

Why seek efficiency in production if we must throw away the goods from our factories before they have begun to show the signs of wear? I am curious and want to know.



# "Constant Readers" at \$10 a Head

By ROBERT L. BARNES

**W**HEN I was twenty-two, I bought my first newspaper for \$8,500 and sold it a year later for \$16,000. I had planned to hold it longer than that, but \$16,000, cash in hand, looked pretty good to me and I moved on to a larger town. Just a month ago the same paper sold for \$75,000. It is just thirteen years since I owned it and the circulation is still about 2,200. But the value of newspapers isn't wholly a matter of circulation. A lot of things have happened since 1912."

## Why This Jump?

A SUCCESSFUL publisher, in a reminiscent mood, made that statement to me. It set me to wondering what had happened in the last thirteen years to account for such an increase in value. The story my friend told accounted for it in large part.

"Of course the sale at \$75,000 was a chain proposition. The Ford idea has been adopted in publishing just as in other industries. Newspapers are now big business. It's hard to realize how fast this change has come about. Take one example, the growth of chains. In the last four years their number has doubled, and the number of papers so controlled has increased 50 per cent. Of course, with a total of 55 chains controlling 228 papers, you can see that most of the chains are small ones, though the largest of the chains—Scripps-Howard—has twenty-six papers and Hearst has twenty-five.

"It's obvious that three papers can buy stories that one couldn't afford and that they can hire men whose experience and judgment put new life into all three papers.

But chains aren't half as interesting as the general change that has come over newspapers in the last twenty years—really in the last twelve. My experience is fairly typical.

"After selling my first paper, I purchased another in a larger small town. It was typical of many small-town dailies. The plant was housed in a dejected look-

ing sort of building. The editorial office was on the second floor in the rear. It had a couple of plain pine tables stained with ink and well whittled by years of visitors. The floor was littered with newspapers and the debris from scissors and paste. There were a few dilapidated chairs; out in the center was a Franklin stove whose red glow in win-

"One day old John Tyler, the local state senator, walked into my office. It didn't take him long to get down to business. I had been laying down a barrage on him for various of his dirty dealings; and, boy! Was he mad? The expurgated gist of his remarks was that if I didn't stop my attacks he would have me up for libel. When that didn't faze

me, he said he would bust the paper higher than a kite.

"I didn't particularly mind. I had the goods on him and I didn't think he could ruin me. But he was mad. I guess the shoe pinched pretty tightly. He hired a fellow by the name of Colonel Lyons and put up some money to start a paper. Neither he nor Lyons knew anything about running a paper. Lyons was a booze-fighter, had been a medicine man, storekeeper and general hanger-on. About the only copy in his paper consisted of reports of Tyler's speeches or attacks on me, and these were often nearly the same thing.

## Fights and Figures

"I DIDN'T spend very much time or space attacking him, though I put in enough to show I wasn't cracking. Mainly, I continued to peddle the local news of John Smith's accident and Seth Jones' new cow, the sort of stuff people like to read. But Lyons gave me a run for my money, and it started me on a new path.

"Advertisers began to pull out under pressure, and I knew I would have to make one dollar do for two. So I put in a cost accounting system. It was a simple one, but I knew where every cent went. Wherever possible, I got cash instead of produce in payment for subscriptions and advertising. I got the whole office reorganized. The town loafers were given short shrift. The place began to look more like a bank than an old-fashioned newspaper office.

"After getting the office organization fixed up, I went to work on advertising. In those days no one believed very much in advertising. They paid for it—occasionally—as a civic duty. But I knew I



Here is the way a San Francisco newspaper of 1850 made its appeal for circulation. The solid type pages tell romantic stories of the gold rush

ter acted like a magnet to all the town loafers. I don't know what was the magnet in summer; there were always some hanging around and keeping you from your work.

## Old-Time Subscriptions

**B**Y THE stove we always kept a box of sand, usually the same box, for the convenience of callers. If you looked out of the window—that is, providing the glass was clean enough—you could see a shed where I kept the payments for subscriptions and advertising. It used to be a pretty precarious living having to depend on Jim Waters for a bushel of potatoes, or Ed Perkins for wood.



All the News That's  
Fit to Print.

# The New York Times.

THE WEATHER

For the City of New York and Vicinity  
Friday, September 12, 1914  
Clear, with occasional light rain  
Temperature 60 to 70  
Wind light to moderate, variable

NEW YORK, FRIDAY, SEPTEMBER 12, 1914—TWENTY PAGES

NEW YORK, FRIDAY, SEPTEMBER 12, 1914—TWENTY PAGES

TWO CENTS

## PERSHING LEADS ARMY IN FIRST BIG DRIVE; PINCHES ST. MIHIEL SALIENT, CITY IS TAKEN; GAIN OF FIVE MILES MADE AT SOME POINTS

1,693 REGISTER  
R THE NEW ARMY  
NEW YORK CITY

Gen. Pershing's First Army  
Has Taken St. Mihiel

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A contrast in the methods of attracting readers in the same paper. The above paper speaks for itself; below, details of the Battle of Gettysburg are given

had something they needed and would buy if I could show them how much they needed it. I had my circulation figures certified. There was no estimating in those figures; they included only those who had paid for their papers. I also figured out accurate costs of space. Then I went out and sold advertising space to the town merchants. I helped them with their copy and gave them suggestions; in fact, made the advertising so good it paid.

"I stuck to my rates, too. No cut-rate business for me. I had seen others start cutting and I knew what inevitably happens. I had seen too many papers and too many stores go out of business because of price-cutting. It doesn't pay, though at times things look pretty black.

"I was proud to be a publisher, and I knew that if people wanted a newspaper they wanted one that is self-respecting and the only way to be self-respecting is to be self-supporting. You know it's funny how an idea seems to hit a lot of people in various parts of the country all at once. Perhaps it's spontaneous generation and perhaps it's some little thing that everybody happens to notice, and it sets up similar lines of reasoning in all their heads. Anyway,

along about that time a lot of publishers began to feel the way I did. We sold our readers news and our advertisers space. To get people to read the news we had to stop coloring it with our personal opinions. But, seeing that we had opinions which we had to express, we kept them on the editorial page. If we hadn't made these changes, we would probably have still been a cheap little ragged-edge business. When we got our readers we began to wonder how we could sell them to advertisers. It was all right to claim 2,000 readers for the *Millington News*, but the town only had 1,200 and there were other county newspapers in a sparsely settled county. No, sir; advertisers began to demand we prove our 2,000.

### The Birth of the A. B. C.

"IN 1913-14 we set up the Audit Bureau of Circulation. That was a job, but it was worth doing. If we hadn't done it, it wouldn't have been long before the government would have set up a govern-

ment department, and then where would we have been. I think we were one of the first businesses to realize the importance of self-regulation. We didn't call it that, but the effect was the same. Perhaps the Bureau has been more successful, because we got no thrill out of hearing luncheon club orators kid our virtue along.

"We knew that if the A. B. C. was to mean anything it would have to have power to enforce any regulations and decisions that it saw fit to impose. It took some time to get a satisfactory definition of circulation, but one was finally worked out. We gave the A. B. C. power to suspend or expel members who didn't live up to regulations, and so valuable have A. B. C. figures become that over 1,900 publications are living up to the rules.

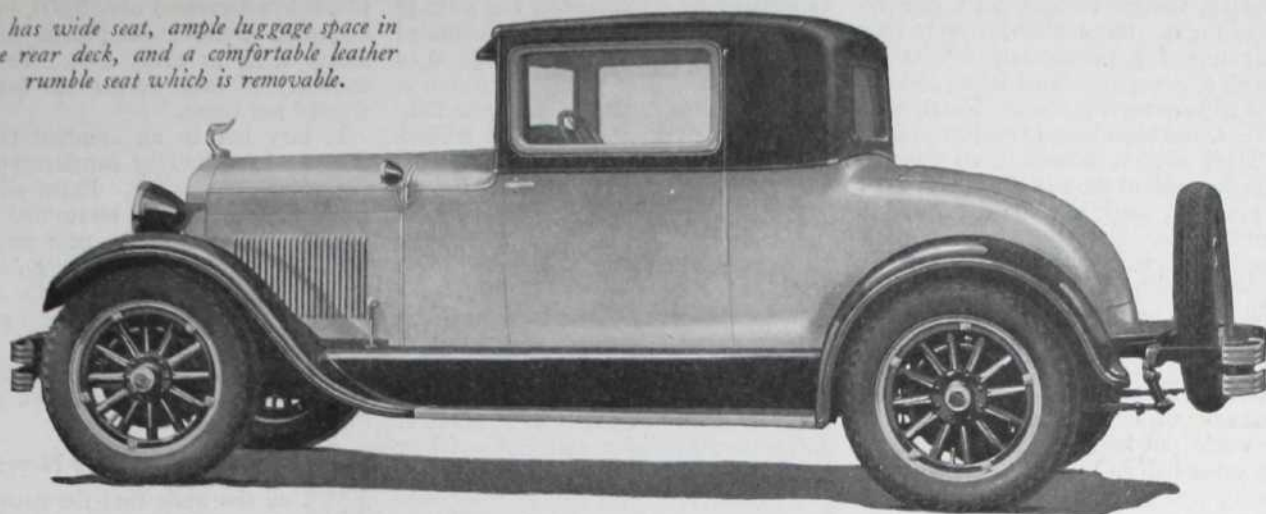
"This new conception of a newspaper—the idea that an editor is not working for some particular cause or party or clique but for his readers—has brought a tremendous change in the standing of newspapers as a business. "Newspaper properties used to be sold on the basis of the weight of the machinery with a deduction of 50 per cent for safety's sake. Editors were regarded as fine fellows, scallawags, cranks—anything but business men. But with the building up of the profession they are now accepted as business men and representatives of one of the big industries of

VERY IMPORTANT NEWS		NEW YORK, FRIDAY, SEPTEMBER 12, 1914		PRICE THREE CENTS	
<p>Gen. Pershing's First Army Has Taken St. Mihiel</p>		<p>Gen. Pershing's First Army Has Taken St. Mihiel</p>		<p>Gen. Pershing's First Army Has Taken St. Mihiel</p>	
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**ESSEX COUPE \$775** *f. o. b. Detroit, plus war excise tax.*

*It has wide seat, ample luggage space in the rear deck, and a comfortable leather rumble seat which is removable.*



# World's Greatest Value altogether or part by part

Here is value that dims even the great Essex of 1927, which stood at the pinnacle, outselling every other "Six" at or near the price by an overwhelming margin.

Here are performance, beauty, comfort and price advantage far excelling that great predecessor which brilliantly led the possibilities of its day.

Completely new, inside and out, much larger looking, and larger in fact, this more beautiful new Essex with a wealth of costly car detail, gives an instant and lasting impression of finest car quality such as was never associated with this price class.

As you regard its handsome ensemble, or go over it detail by detail you get the same compelling conviction of completeness and finish, of costly car quality and construction.

New size—larger, longer, wider, inside and out.  
Higher radiator with vertical lacquered radiator shutters—on no other car under \$2,000, Hudson excepted.

Colonial type headlamps and saddle lamps.

Bendix four-wheel brakes.

Silenced body construction.

Five-inch tires, a full size larger than used on any other car of this weight and price.

Wider doors, for easy entry and exit.

Worm and tooth disc design steering mechanism.

Electro-lock type of theft protection.

Adjustable tire carriers.

Fine grade patterned velour upholstery.

Wider, higher, form-fitting seats.

New instrument board, finished in polished ebony, grouping motometer, ammeter, speedometer, gasoline and oil gauges.

Starter on instrument board.

Steering wheel of black hard rubber with steel core.

Light, horn and throttle controls on steering wheel.

**ESSEX COACH**

**ESSEX SEDAN**

**\$735**

**\$795**

*f. o. b. Detroit, plus war excise tax*

# The New ESSEX Super-Six

*When buying an ESSEX SUPER-SIX please mention Nation's Business to the dealer*



the country. In fact, selling newspapers has become a business just like stock broking, though colleges don't give degrees for it. Since 1922 investors have purchased approximately \$92,500,000 worth of newspaper bond issues and several millions more in stocks. Nearly \$45,000,000 has been issued this last year.

These brokers attend to all financial arrangements of the sale of a paper. They appraise it, work out the details of financing, etc. Recently a man came to one of them with a string of four papers to be sold. They appraised the 'goodwill' value as \$9,000,000, or over four times the physical valuation of the property alone. They had arranged with a reputable financial house to sell bonds to that amount, but the buyer decided that he would put half of it in cash and sell the other half in bonds. Those are surprising and accurate figures.

### Papers Worth Millions

"WHEN the *Kansas City Star* sold for \$11,000,000 and the *Chicago Daily News* for \$13,000,000 many people expressed surprise. These are big sums. They had heard, perhaps, of local papers selling for what seemed like a lot of money, but \$11,000,000 is a large sum even in these days of big figures.

"It's hard to say what determines the value of a newspaper. The physical property is usually the smallest part of it.

Earnings over a period of several years give a good indication. The acceptance of a paper by a community has a lot to do with it. Victor F. Lawson estimated that circulation is worth from \$8.00 to \$10.00 a head. But the *Dallas News*, in a city which in 1920 had less than 160,000, was appraised at over two million.

### What Is a Paper Worth?

"THERE are lots of questions I can't answer, and that's one of them. The story I have told you is my idea of what happened. Newspapers were about the first industry to find that cooperation paid, and it has put publishing on the map of big business. If you are interested in the big business side of publishing, why don't you get back numbers of *Editor and Publisher* and find out how big the business is."

With that suggestion, the ex-newspaper man sent me off on a search which disclosed several interesting things.

The stabilization of the industry and increasing demand for its product probably account in large measure for the fact that publishing is now the fifth largest industry in the country. There are over a half a million people engaged in it, and its product is worth more than two billion dollars a year.

Occasionally one hears echoes of the old argument that the use of machinery displaces man power. This industry pre-

sents one interesting refutation of the argument. Since 1900 the number of plants has decreased over 2,000, but the decreased number of plants employs nearly twice as many men. The productivity of each worker has been increased ten times.

It may not be an unmixed blessing that we have Sunday supplements and sixty-four-page dailies. Extra editions, radio, automobile, real estate and comic sections may not all be necessary, but there is a demand for them. Last year, in printing all these things, the newspapers used up an average of 58 pounds of paper for every person in this country. That is over fourteen times the amount used when grandfather was a small boy.

### What of Tomorrow's News?

BUT all the while that the newspaper has been growing more efficient the business has been growing more complicated. This has brought about several things; for instance, in the past six months the number of papers has decreased from 2,001 to 1,952. Consolidations are largely responsible for this. There are now 419 morning newspapers or not quite a fourth the number of evening papers, yet the combined circulation of morning papers is 13½ million against 23½ million for the evening papers, with both growing all the time.

## THE NEW YORK HERALD.

W 10011 NO. 10159

NEW YORK, SATURDAY, APRIL 13, 1912.

PRICE, FIVE CENTS.

### IMPORTANT.

#### ASSASSINATION OF PRESIDENT LINCOLN

The President Shot at the Theatre  
Last Evening.

#### SECRETARY SEWARD

SHOT IN HIS OFFICE

AND

NOT MORTALLY WOUNDED.

Charles and Frederick  
Barnard Badly Hurt.

ESCAPE OF THE ASSASSINS.

Intense Excitement in  
Washington.

SHOCK AT THE DEATH OF MR.  
LINCOLN.

Willis Booth, the Actor, the Alleged  
Assassin of the President.

To. To. To.



EXTRA.  
8:10 A. M.

#### DEATH OF THE PRESIDENT.

Further Details of the  
Greatest Crime.

ADDITIONAL DISPATCHES FROM THE  
SLAVEHOLDERS OF WAR

What Is Known of the Attack

#### THE REBELS.

##### JEFF DAVIS AT DANVILLE

His Latest Appeal to his  
Defeated Followers.

For Thomas the Fall of Richmond a Whore and  
Shameless in London the Rebel Army  
I am to Have a Fine Piece to Play.

THE 'CONFED' PROMISES TO HOLD ON  
GAINS AT ALL HAZARDS.

Lee and His Army Begged to  
Go Safe.

CONFEDERATES AND THE REST OF THE  
COUNTRY BEHOLD THE RESULT.

The Order of the War of the North, Confessing  
Against the Surrender of the South  
to President Lincoln's Army.

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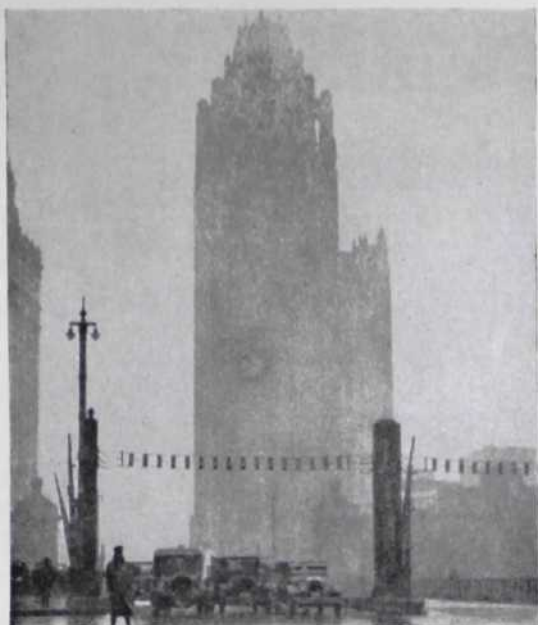
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Thus *The New York Herald* presented one of the most important events in American history, in its efforts to gain readers. The heavy column rules were carried for a month





# *Champion of the World!*

In 1927 The Tribune printed more lines of advertising than any other American newspaper—more lines than any other publication on earth. In Chicago The Tribune's lead over the second newspaper was 10,000,000 agate lines.

## **Chicago Tribune**

THE WORLD'S GREATEST NEWSPAPER



# That Foul Fiend, the CORPORATION!

The public owns America, and is beginning to know it, but there are still those who shudder at "the interests"

By WILLIS J. BALLINGER

## TO THE EDITOR:

I HAVE BEEN fourteen years in business. For the last three years I have been president of a small corporation with less than a thousand stockholders. So far as I know we have done nothing but run our business with a modest amount of success and with due regard to the interests of those stockholders, and I think with a due regard to the welfare of our employees and the public.

I know that my salary and my dividends from the small amount of stock I own are less than my brother makes as a partner in a successful brokerage business.

Yet, only the other day I heard a speaker talk about the "menace of the corporation," and I rise to ask, "Am I a menace?" I presume there are bad corporations, though I don't know of any. I know there are bad individuals.

In the meanwhile I ask again, "Why pick on corporations?"

Yours, ———

WE asked Willis J. Ballinger, a Yale graduate who formerly taught economics at Smith and Amherst, to answer this letter for us. Here is his reply:

**T**HAT famous description of democratic government "of the people, by the people and for the people" is in fair way of becoming descriptive of American business. We have 20,000,000 investors to show how great is our democracy of business.

But it has been no easy road that business has traveled on its way to that democracy. Rather it has been a road strewn with wrecks of small and inefficient industries. On the record of the journey are stories of consolidation where the iron hand was not always velvet gloved. At times our old friend "the innocent bystander" was the one who, as in so many stories of crime, was shot.

And from those changes in business grew much of that hatred of the corporation to which our letter-writing friend refers. And some of that hatred, fed by speech-makers, by politicians, by Babbitt-baiters, still survives. Hates and prejudices and ignorance all die slowly. Forty years ago the goal of business success was to announce "my factory" or "my business." Business eminence was in proportion to one's business independence. This, in turn, was measured by the degree of outright ownership of the source from which one drew income. In the old south the outright ownership of a plantation had been for

many years the corner-stone of business or social recognition. In the north and west after the Civil War owning one's business was the rôle for heroes and freemen.

And this era of individual proprietorship in business at its beginning was very much like a condition of economic feudalism. In fact, government and American business have evolved along similar lines. Monarchy went through a stage of deposing local chieftains, whose independent authority caused political and social chaos. A few strong men put unrestrained independence out of commission. Similarly, in earlier days of American industrial development groups began wars of consolidation and extermination against hordes of inefficient, even ruthless, single proprietors.

## Start of Business Democracy

**A**ND as kings had no vision that they were laying the foundations of democracy, so these earlier monarchs of American industry did not realize that they were laying the foundation for the people's ownership of business by their task of stamping out business feudalism. For just as monarchy was taken over by democracy and the day of the individual proprietor in politics passed, so, too, the same democracy has been busy taking over individual ownership in business and converting it into group proprietorship—the corporation.

But these early wars of consolidation against little owners by strong proprie-



This cartoon, published a quarter of a century ago, shows the stuff with which the public was fed. The flame then kindled has not yet been extinguished

tors left some bitter memories that even a lapse of forty years of time has not effaced. In the scramble for power that resulted in the rise of business giants and the passing of many once-independent proprietors, the corporation seemed in the public eye a deadly weapon for overthrowing the small owner. He could not possibly contend against the accumulated resources, the business acumen and industrial efficiency which a corporation could bring to bear on him.

The Harrimans, Vanderbilts, Goulds, and Rockefellers cast their mighty shadows over the industrial picture, and "big" business was symbolized by pictures of a few colossal figures bestriding whole industries.

## Resentment of Small Owners

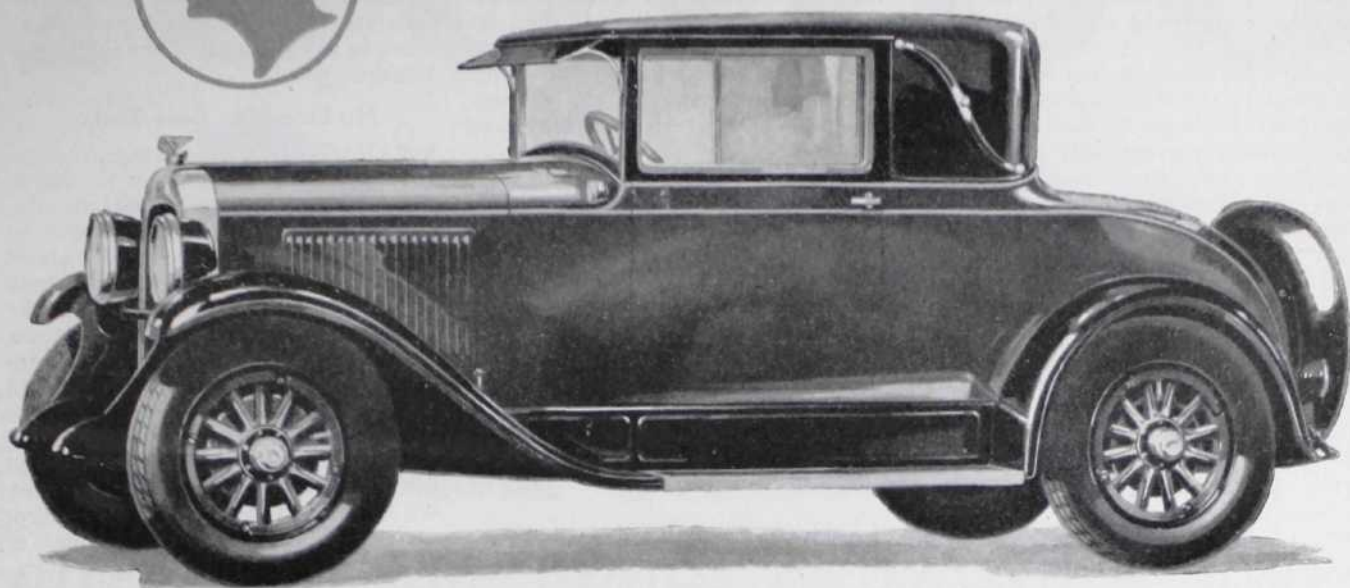
**B**UT the little owner whose castle was overthrown by a stronger man was bound to feel a deep resentment against his conqueror and the weapons he employed. His cry that he had been robbed, the public agitation that ensued, the memory that has been handed on—all help to explain what still exists of the feeling of hostility towards the corporations and big business. The indictment brought against business forty years ago by the inadequate little owner has failed, but some of the odium still attaches.

But what sympathizers with the victims of the mastodon age of American business often fail to see is that the corporation of today is no longer a weapon of giants who put little business individualism to the sword, but a means of producing mass prosperity, and that the corporation of today is controlled to an impressive degree by the average man.





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## *New in Style* from Radiator to Tail-Light —Offering Scores of Vital Advancements *at No Increase in Price!*

Successful as earlier Pontiac Sixes have proved in the service of fleet owners, the New Series Pontiac Six now bids for even greater success. For with its new style, its new six-cylinder performance and its scores of vital advancements at no increase in price, the New Series Pontiac Six represents a value which no commercial user of motor cars can afford to overlook.

The list of improvements at the left reveals that every single advancement offered in this impressive six is one which is particularly desirable in a business car. The smart new style of its Fisher bodies promotes the prestige of companies whose representatives drive such attractive cars. Its greater

power, speed, smoothness and snap combine to give the high-type, six-cylinder performance which commercial traveling requires. Its added safety features, including four-wheel brakes and a sturdier frame provide greater assurance of uninterrupted service. And its increased economy, resulting from such advancements as the G M R cylinder head and the newly designed carburetor, offers the final recommendation that business men demand.

Every executive responsible for a motor car fleet should investigate the New Series Pontiac Six. Call the nearest Oakland-Pontiac dealer to arrange for a demonstration of this successful six, or write the Commercial Division at the factory.



Suppose we could gently waken from his forty years' sleep Commodore Vanderbilt, who was one of the representatives of this dead age of business. He was not a bandit of business, not a ruthless robber, but rather an extreme individualist—a man who saw himself as the sole power in the business which he headed. Let's imagine him coming back to earth to report on the modern corporation. Through the door of the private office of a present-day corporation president and business leader, let's escort the Commodore with his well-remembered powerful physique, large and defiant head, ruddy cheeks, sparkling, deep-set eyes and snow-white hair.

### "Who Is Boss Here?"

PROBABLY his first query would be: "Who is boss here?" The old-timers enjoyed one-man control of businesses. Vanderbilt owned outright at one time 87 per cent of the stock of the New York Central. The Great Northern was a sort of "registered trade name" for James J. Hill and family. The masters of iron and steel numbered scarcely half a score. Six men—John D. Rockefeller, J. D. Archbold, Henry Flagler, Henry H. Rogers, Charles Pratt, and Oliver H. Payne—at one time owned more than 51 per cent of the stock of the old Standard Oil Company.

Vanderbilt would find it hard to understand that the day of "my corporation, my railroad, my factory" was passed and that individual autocracy in business had yielded to group responsibility and to the corporation of many owners.

He would learn with astonishment that today his New York Central has thousands of owners; that his once complete domination had been whittled away until his family owns only 6 per cent of the road's stock; that the colossus in this railroad today is George F. Baker, whose personal power rests on only 57,530 shares of stock out of a total number of 3,048,377—less than 2 per cent.

And suppose James J. Hill could be informed of the change that had come over his Great Northern. The road today has 44,905 owners, and among the ten largest stockholders the name Hill doesn't appear.

John D. Rockefeller knows that today his family has appreciable holdings in only one of the many subdivisions of the once united Standard Oil Company. This large and terrifying holding in the Standard Oil Company of New Jersey consists of 13 per cent of

stock. The other 87 per cent is held by thousands of owners.

Thus, while the corporate forefathers may have used corporations to swallow the people, the people in the last twenty years have been industriously swallowing the corporations. Step by step the public—the common people to whom so much oration has been devoted—has taken over ownership of the corporations until today we have a new social structure.

The dictionary defines socialism as "a state of society based on public or collective ownership of the main instruments of wealth production and on democratic management of the industries by the community for the benefit of its members."

Are we not building up a "new socialism"—the ownership by the many of our great producing and service agencies? And basing that "new socialism" on the sound foundation of capitalism and private initiative?

### Families Held Packing Plants

UNTIL very recently the great meat-packing business of Chicago was a family affair of Swifts and Armours and Morris. Today Armour and Company has 77,000 owners; nearly one-half of the total owners of the Swift interests are company employees, some 55,000. The electric light and power industry has more than 1,250,000 owners today. In 1900 the American Telephone and Telegraph Company had only 7,535 stockholders. Today it has more than 400,000 owners nearly 100,000 of which are company employees. The employees of what, until very recently, was our greatest corporation—United States

Steel—own more stock outright than do the present board of directors. Ownership domination is no longer represented in the holdings of those at the head of a modern corporation. Management has become the democratically elected representation of economic constituencies which in the last analysis are millions of American people.

### No One-Man Boss Today

MANAGEMENT is no longer the one-man boss. Commodore Vanderbilt might find it hard to realize that the masters of business today owe their mastery to their ability to make small nations of investors prosperous. The Patrick Crowleys, the Owen D. Youngs, the Daniel Willards, the Albert H. Sloans and all the other dominant figures in industry today are leaders whose control no longer rests on the principle of the divine right of personal ownership, but on a basis of individual utility to the thousands of investors they represent. We have moved forward from the days of "my" and "mine" to the day of "ours" in industry.

And there would be another landmark of Vanderbilt's day about which he would very probably make inquiry. When the day of individual control of corporations by a few adventurous power seekers began to wane, up popped a new force—the banker. When business began to be reformed, recourse to banks and bankers was inevitable. And so we had an era of banker control when corporations went hat in hand to bankers for the wherewithal to do legitimate business. And it became customary, when bankers reorganized a corporation, to take a good share of a corporation's stock in the name

of individual bankers and banks. This led to an attack on banker domination of corporations.

Justice Brandeis could write his widely read book of 1913 flaying the House of Morgan for its seizure of stock of the newly organized Steel Corporation, but his book has been out of date for at least ten years today. Today banker control of corporations has waned, for the corporations today have learned to turn to the greatest source of wealth, the man of modest means.

If all the dollars of all the incomes over \$50,000 a year could be piled up, their grand total would be little over \$1,500,000,000. And if all the incomes of \$10,000 a year and over were to be put in a huge pot, the total would only reach to about \$6,000,000,000. But, if we were to take all in-



Cartoonist Opper's conception of what the individual was coming to under the regime of the trusts of a generation ago



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# Burroughs



comes of \$10,000 and under, we would get a total of over \$40,000,000,000. And it is from this last source that corporations today must look for much of their financial nutriment.

The president of a modern corporation would inform Mr. Vanderbilt that corporations had become merely an established form for conducting business instead of being peculiarly an agency for accumulating wealth quickly, but there are quarters where the idea still holds that a corporation is a huge affair and a specialized rather than a general form of doing business.

The truth is that the corporation has swept the field of business and today is just as much in use by the little man as by the big one. In new industries that have appeared in America recently the domination of the corporation method of doing business is particularly noticeable. In the automobile industry today over 92 per cent of the establishments are corporations; in the sugar and beet industry 98 per cent are corporations; in the cement industry 95 per cent; in coal tar products 92 per cent; in oleomargarine and butter substitutes 98 per cent; in aeroplanes 84 per cent.

### High Birth Rate

**D**URING the year 1925 to 1926, 12,651 new corporations were born into the business life of the nation. And, during this same year, of the 252,334 corporations that made any profit the majority were really only little partnerships in the scope of their activities and earnings. Of the corporations that made any money for that year, 85,828 reported incomes of \$2,000 and less. A partnership that doesn't net more than \$2,000 or under would be considered a very humble business venture, indeed. More than 40,000 corporations reported modest incomes running between \$2,000 and \$5,000, and nearly 22,000 corporations turned in profits ranging between \$5,000 and \$10,000. Thus over one-half of profit-making corporations for the year 1925-1926 were very far from being a rich man's bonanza, or the field of the man of means.

The idea still persists that a corporation is a kind of sure profit-maker and that there is a money-getting magic about the very name. In 1925, 40 per cent of our 430,072 corporations reported deficits averaging \$10,000 per corporation. In that year, also, 170,738 reported that they didn't make a nickel of profit. Nine-tenths of the 60 per cent of our total number of corporations that reported any profit whatsoever earned

in 1925 an average of less than \$25,000 a piece. And the average profit of the income reporting corporation was only \$38,000, out of which had to be deducted federal taxes and this small residue distributed, if distribution was made, to a large number of hungry stockholders.

And what about competition? There may once have lived a corporation owner who believed in the principle of

A great manufacturing company in selling its product by the hundreds of thousands cannot lose the good-will of those hundreds of thousands who buy; if that great manufacturing company has tens of thousands of stockholders it cannot be false to them.

Commodore Vanderbilt might be most astonished when he saw how the nation has built on a corporate structure not only the richest nation in the history of civilization, but the nation where riches were most widespread. As I look at it there are three angles from which the average intelligent person should view corporations.

First, need we fear the corporation? Is it a menace through its power? Obviously, no. We need no more fear a corporation because it's a corporation than we need fear an individual. Large corporations have great power, but large corporations in these days are owned by large—and constantly larger—numbers of men and women.

Secondly, the average person is interested in the corporation as a field of investment. And here he will find that the corporation is by far a necessary field for investing his earnings. It is the only way in which he can acquire a small unit of a large industry.

### Better Reports Obtainable

**I**T IS worth while to note how it has grown increasingly easy to learn the facts about a corporation investment. More data and information can be obtained about a corporation than about a partnership or individual business. Stock exchanges increasingly insist on more careful and more authentic reports about corporations. Everywhere the corporation's books are being opened.

Finally, I should think the average person would be interested in knowing what a debt we really owe to the corporate form of business for the great present-day prosperity which we enjoy as a people.

Often we toast the Fathers of the Constitution. Let's also toast the Fathers of the Corporations. If the one gave us a great government, the other laid the foundations for material prosperity. In 1890 the wealth of the nation was put at \$65,000,000,000 and in 1920 at \$320,000,000,000.

Under corporate forms the opportunity was opened for the people of the nation to make a social "recapture of the tools of production." The workers own the tools of production today.

The public knows that it—the public—is the real owner of America!

## A Saga of the Sour

**W**ILLIAM DOLE was a crabbed soul who wrought a wicked lyric; in rancid verse his town he'd curse with language most satiric. Bill loved to bait with hymns of hate the stupid town officials and air his views in the Daily News in squibs signed with initials. The torn-up street his poet feet would spurn in bitter sallies; his ancient beak in constant pique kept poking into alleys. No thing on earth moved Bill to mirth—his earnestness was deadly; from alley smells to school-kid yells he raged in ranting medley.

A Chamber man at last began to weary of Bill's knocking and had his say in Bill's own way, Bill's very method mocking. He wrote, "O Bill, you bitter pill, you are most hard to swallow. Your nagging lines, your snarls and whines—how many more must follow? The city needs your facile screeds to boost instead of chide it; if it's astray, you know the way to help it and to guide it. Come lend a hand, play with the band in notes somewhat harmonic. Cooperate, do not berate; good fellowship's a tonic. Come, join us, Bill; thaw out your chill—be not so supercilious. If looked at right, this town is bright; so, Bill, quit being bilious."

At first Bill fumed and then he gloomed and called his critic snooty. The rhymes he wrote took on a note defining civic duty. The Commerce Club asked him to sub on its "Spotless Town" Committee. He changed his ways and sang the praise of teamwork for the city.—L. A. B.

selling a few units of production at as high a price as possible. But today corporation business is wedded to Henry Ford's principle of production—sell as much as possible at as low a price as possible. So anxious is business to produce and sell that we are facing a national menace, in the opinion of many economic experts, from too much production and too costly selling.

Three great forces have helped to bring about this new democracy of the corporation, to keep business in a straight path even if it were inclined to step aside.

One is this mass ownership; another is the need of public good-will which mass production intensifies; the third is the interdependence of business on business so that reputation of fair dealing and honesty are of prime importance.





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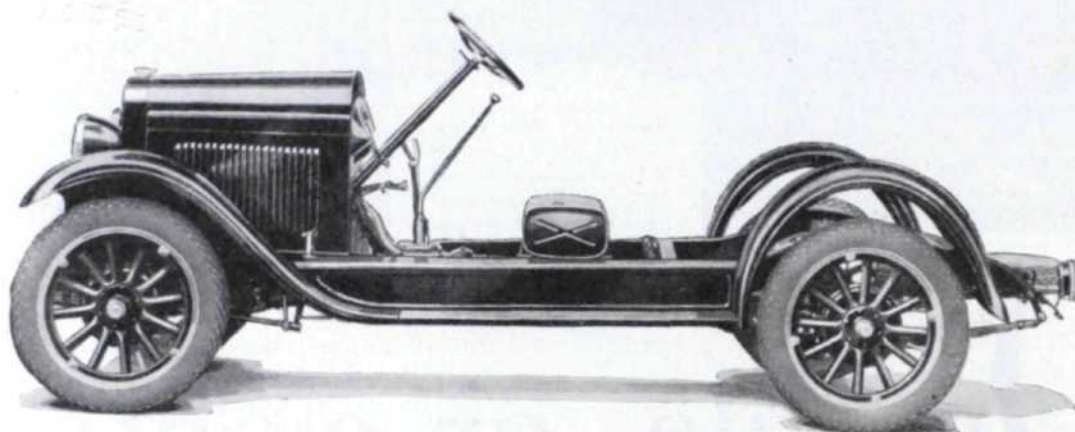
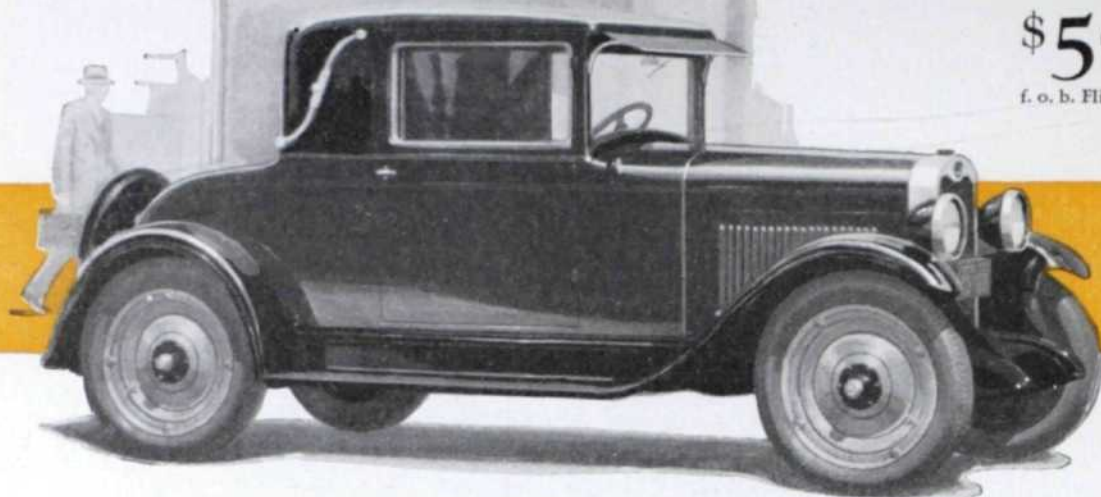
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The new Chevrolet Coupe is the smartest and most commodious two-passenger enclosed car ever offered in the low-price field. Large parcel space back of the seat, with generous luggage compartment in the rear. Rear deck covering removable to accommodate "slip-on" box.

**\$595**

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The Chevrolet chassis offers a number of remarkable engineering advancements—including a 4-inch longer wheelbase; stronger, sturdier frame; 4-wheel brakes; alloy "invar-strut" pistons; hydro-laminated camshaft gears; mushroom type valve tappets; and a ball bearing worm and gear steering mechanism.

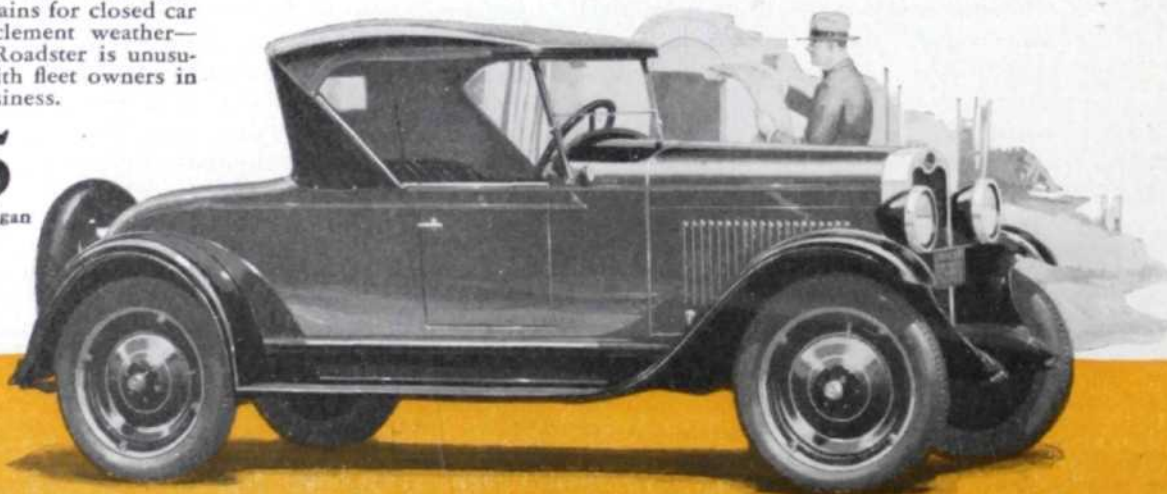
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With its body re-designed for beauty and comfort . . . its rear deck removable to install a utility "slip-on" box . . . and with close-fitting side curtains for closed car comfort in inclement weather—the Chevrolet Roadster is unusually popular with fleet owners in every line of business.

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In beauty of line and color . . . in sturdiness of construction . . . and in its surprising roominess and comfort—the new Chevrolet Coach, with its marvelous new body by Fisher, surpasses all previous achievements in providing closed car value!

**\$585**

f. o. b. Flint, Michigan





# Business Comes to Teaching's Help

By T. W. VINSON

Executive Secretary, National School Supply Association

**N**OT LONG ago I was in Hibbing, Minnesota. I stood on a street corner fascinated by a great building, beautiful in its proportions, which rose from the flat prairie land. In other surroundings and with a mellower tint it might have been the baronial castle of a lord. But here, in new America, it was merely a high school. And as I looked the walls and towers seemed to melt. There arose before me a hill-top, at the foot of which bubbled a spring, and upon whose tree-created summit stood a crude little structure of logs, with perhaps thirty feet square of floor space.

Within the log building a board floor was laid, and six benches were firmly placed. The latter were made of planks, each 8 feet long, 12 inches wide, and 2 inches thick. For this floor and for these benches money had to be paid to the saw-mill man, who had ripped the planks out of logs. They had been hauled a considerable distance, for the mill was not in the immediate neighborhood. The upper side of the bench planks had been smoothed by an adz skilfully used in farmer hands. "Smoothed" is relatively descriptive. The marks of the tool were clearly evident, and here and there a sliver had been left which was later to penetrate restless little legs.

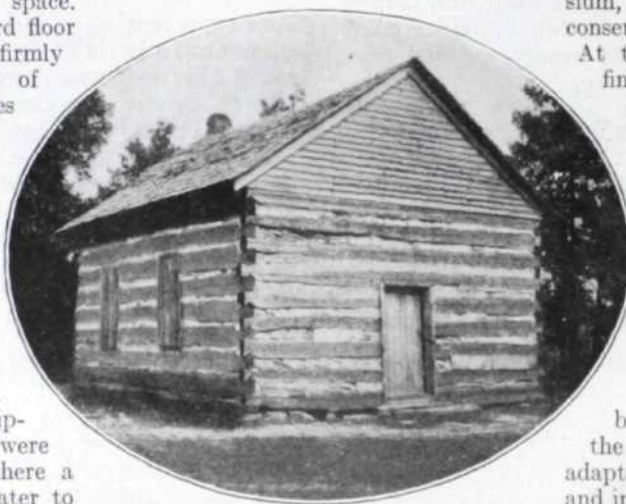
## When Six Sat On a Bench

**T**HE planks stood on spindle legs—stout spindles—inserted into holes, one at each corner, raising them some 16 inches above the floor. They were, of course, backless. Six wriggling juveniles were supposed to occupy a bench. At times seven tried to squeeze upon it—a temptation always for a sudden concerted movement which projected the seventh over seatless space to the floor.

This school included pupils from six years old to twenty, but all sat on seats of like height.

On the back wall hung a blackboard made of dressed planks and coated with lampblack; beside it stood a box of soft chalk—cost, 10 cents. In a corner was an old wooden bucket, filled at the spring, and a tin dipper. The investment for these essential comforts totalled

A far cry from the log schoolhouse to the fine modern high school (Hibbing, Minn.), yet the change took place in a generation. The credit for much of the improvement belongs to business, which by study and research has evolved a most efficient product in the up-to-date schoolhouse



65 cents. In another corner stood a bunch of switches, with an average length of 6 feet, springy and limber, ready for immediate use.

The one cheerful feature of the square room was a big, open fireplace, whose smoke, with much of the heat, passed through a flue into an exterior chimney made of rock and clay. On cold days benches were pulled closer to this fireplace, and two of the bigger boys were kept almost continually busy replenishing the flames with wood. In the school yard was a wood pile, for which the supply had been cut and hauled by the parents of the pupils. It was a chore assigned the boys to split the wood and lay the fire.

Each pupil was supposed to have a spelling book and a reader, procured at his own cost. But often one reader was passed from hand to hand, serving three

or four pupils. Textbook uniformity was unknown. The readers varied in publisher and grade. That may have broken, somewhat, the monotony of study, but it added to the difficulties of the teacher. Here and there was a boy or girl for whom more prosperous parents had provided an arithmetic, but these instances were rare.

Forty years separated the little log schoolhouse from the building before which I stood.

This is not the place to describe the Hibbing High School, with its classrooms, laboratories, shops, office, study halls, library, auditorium, boys' gymnasium, girls' gymnasium, swimming tank, conservatory, club room and band room.

At the time it was built it was the final word in provision for health, convenience and efficiency in the pursuit of knowledge. Of course there is no final word in any absolute sense. And that is a point which, in part, this story is written to stress; for it is with business—organized business—and the part it has played in bettering school conditions and methods.

All the aids which science and technical skill can lend have been brought to the task of equipping the schools of America with the best adapted means for serving the physical and intellectual needs of the child. From the architecture and construction of school buildings to the quality of the crayon with which the youngster writes on the blackboard, every detail of plan and material has been made the subject of the most careful consideration and test.

## Science Fits Out Schools

**T**HE business of school supply and equipment has become not only a commercial enterprise but a field of constant research, of laboratory experiment, of ceaseless effort to improve. The National School Supply Association, an organization of those engaged in the production of school equipment of every sort, has been a foremost factor in promoting the spirit of scientific inquiry and constructive endeavor. Its usefulness in the educational field is threefold in scope—to its members, to school administrators and teachers, and to the



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International Speed Trucks have carried the luggage of some of New York's most eminent visitors—Queen Marie, Prince Bismarck, Lord and Lady Mountbatten, Secretary Mellon, Charles M. Schwab, Mary Pickford, Douglas Fairbanks, Gloria Swanson—and on and on through the Blue Book of fame and aristocracy.

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school public and to the school children.

There was a time when in any program of educational objectives you would have looked in vain for the word "health"; today, by agreement of the leading educators of the country, health leads the list of things on which educational effort should be based. The fundamental work of the schools must be to conserve and enhance the physical fitness of the child as the basis of all other development.

The new and wholly sound emphasis upon this aim enters in very large measure into the programs of those concerns which engage in the making of school supplies and equipment. There is scarcely a point at which it does not touch their work. Ventilation, heating, lighting, water, heights of desks, design of seats—these are among the things in which it is obviously an important factor. To all of them a great deal of attention has been given, and the most expert men in the several fields of inquiry and knowledge are employed to keep the production of equipment abreast of the need and of the latest discoveries of science.

#### Seats Being Tested

IT WOULD be amazing to the school trustee in whom still lingers the idea that a local carpenter can build desks and seats and other equipment just as good as the specialized supply concern can make them, and that money can be saved by buying these "amateur" products at a lower price, to see the thoroughness with which every new form of construction is tested in the research department of the modern plant before it is put on the market.

One school supply concern, and it is typical of others, tests seat hinges by a machine which raises and slams down the seat some 28,000 times. If the hinges stand that they are likely to stand almost any strain to which the average husky boy can put them.

But, of course, the seat problem is much more complex than the mere matter of hinges. How should a seat be shaped so as to serve comfort, convenience and health? How high should it be from the ground? What sort of back should it have? We used to guess at these things and theorize about them without any certain basis for theories. Today they are made the subject for the most painstaking inquiry and gathering of data.

For example, the research department of a certain school supply manufacturing concern devised a scientifically conceived apparatus for measuring the

child in relation to his seated needs. Some twenty or more measurements are made, and automatically recorded by the machine. Many thousand pupils have been measured thus in several different cities, in order to get a typical representation in all grades, and in all types of schools.

But the end of the process is not

Let us take another illustration in a very different field. Here is a case where a school supply concern was directly responsible for evolving and applying a program of art education which has been accepted widely as sound and worth while; and this it did at a time when, as a result of the lack of any definite program and clearly seen objective, art was being thrown out of the schools on the assumption that it was a useless fad. Every art teacher had her own hobby, which she pushed as long as she was in charge of the work. When she went some other came with a new hobby. There was no continuity, and nobody was really getting anywhere. Hardheaded trustees were disgusted; superintendents of schools distracted.

#### A Practical Scheme

THEN this concern, through its research department, after discovering where the trouble lay, set out to remedy it. With the cooperation of the University of Pennsylvania, it worked out a plan for a commission of competent persons in the realm of art who should study the problem and devise a program for general application to the teaching of art in the public schools. The purpose of this program was not to make artists, but to show how the ideals of art could be applied to life—to the making of dresses, the furnishing of homes, and similar everyday interests.

#### Art Teachers Reply

THE proposal was submitted by questionnaire to 5,000 art teachers and directors. It brought a practically unanimous response of approval. And, today, art is going back into many schools from which it had been banished. What is more, the whole supply business benefits by the efforts of this firm, and there is a fine competition to excel in providing equipment for a definite and approved program.

In addition to the private research departments, directed often by expert technicians who have had educational experience, the National School Supply Association has organized its own department of research for the service of its members and the public. It is employing the ablest experts available in the study of problems of common interest.

It has been a long, arduous climb from the little log schoolhouse in Kentucky to the splendid modern high school at Hibbing, Minnesota, and if we know the American people they are not going to surrender any of the ground they have gained.



Henry Ford—Ford



John N. Willys—Whippet

**T**HE BATTLE of the automobile is on. Price cuts on John Willys' Whippet bring it even lower than some types of Henry Ford's Model A; Chevrolet announce new models; Durant says the Star will be actively in the fight. Essex is ready to explain its virtue and its price.

There is no question of production—but how to sell?

A cynic once remarked that a fortune awaited the man who would invent a new vice. Perhaps, but what is more certain is that fortunes await the man who will invent a new device for selling.



Roy D. Chapin—Essex

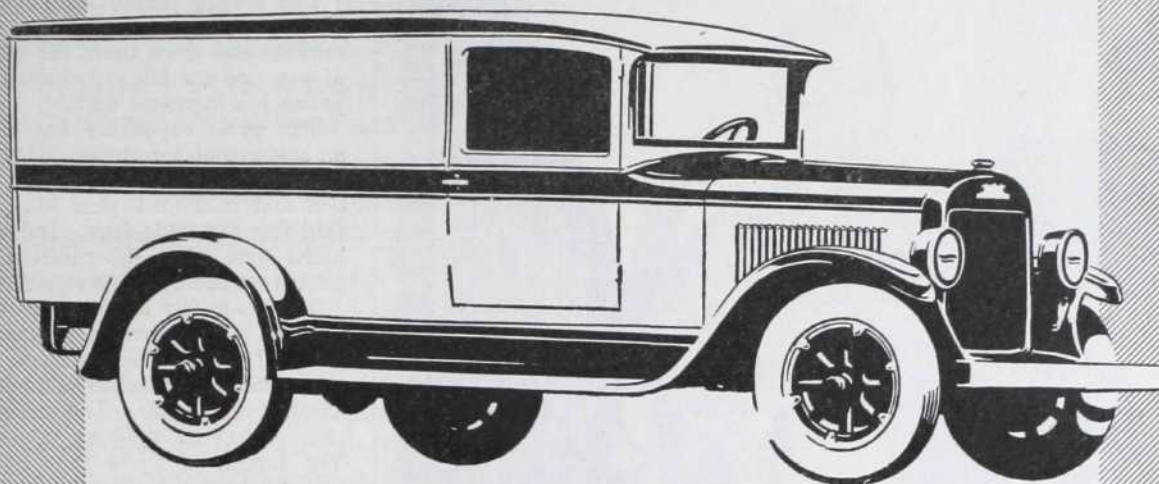


R. H. Grant—Chevrolet

reached in an average seat for a purely hypothetical average child. The data are considered first from the standpoints of anatomy, physiology and hygiene. One of the discoveries made is that the harmful seat is the seat that is too high rather than the seat that is lower than need be. A seat may be low without ill effect—if it is not too low for comfort; but as soon as it becomes high enough to bring pressure on the area just behind the knees it is higher than is best for the school child's physical welfare.



*Here it is!*



# The Tonner

## The Newest Reo Speed Wagon

6 cylinders, L type head  
3 1/4-inch bore, 4-inch stroke  
Unit power plant  
4-point suspension  
7-bearing crankshaft  
Aluminum alloy pistons  
Thermostatic temperature control  
Semi-automatic spark control  
Single-plate clutch

Coupe Cab  
Available as chassis alone  
cab and chassis  
or  
three standard body styles:  
Full panel body  
Stake body  
Express body  
(with or without canopy top)

4-wheel internal hydraulic brakes  
123-inch wheelbase  
Irreversible steering gear  
Extra long semi-elliptic springs  
Malleable iron artillery wheels  
Automatic chassis oiling  
(Myers Patent)  
Fully equipped throughout

### A Speed Wagon for 93% of all Hauling Jobs

#### Junior Tonner Standard Master Heavy Duty

Capacity up to one-half ton Chassis	Capacity up to one ton Chassis	Capacity up to a ton and a half In 2 wheelbases, at \$1345 and \$1445	Capacity up to two tons Chassis	Capacity up to three tons Chassis
<b>\$895<sup>00</sup></b>	<b>\$995<sup>00</sup></b>	<b>\$1345<sup>00</sup></b>	<b>\$1645<sup>00</sup></b>	<b>\$2185<sup>00</sup></b>

Prices at Lansing

# SPEED WAGON

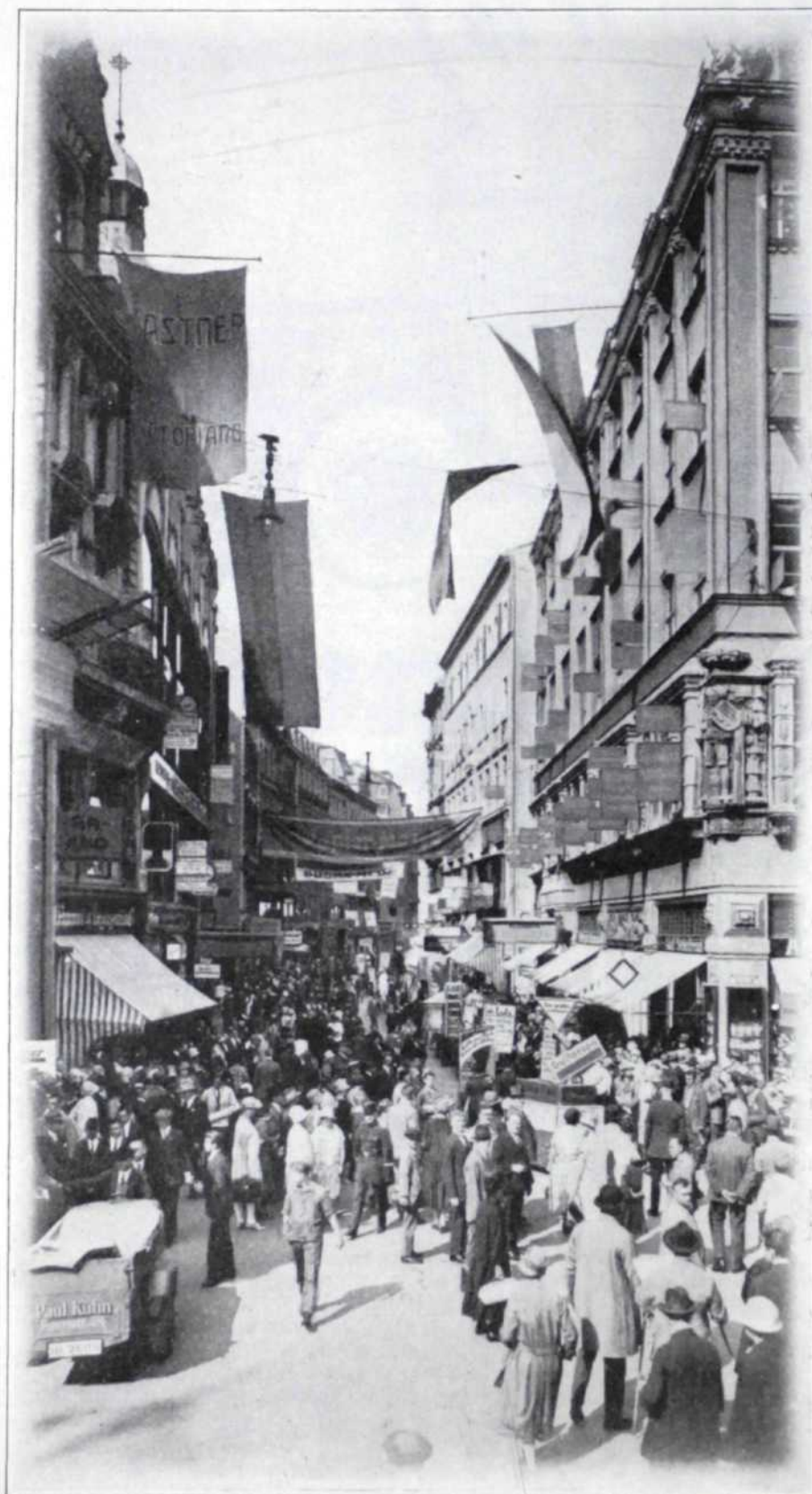
for faster, surer, easier, cheaper hauling

REO MOTOR CAR COMPANY, Lansing, Michigan



# A World Fair That Makes Money

*The Leipzig Trade Fair subordinates amusement to business*



Here is a fair crowd that is buying goods, not merely sightseeing. The Leipzig Trade Fair is of ancient origin, but it shows the way to modern business. It is a world exposition that eliminates amusement features and bars idle spectators, but never loses money. Two thousand Americans will attend it this spring

EUROPE has perfected the trade fair, an institution of ancient origin, which has become a great international exhibition ingeniously adapted to modern business practice.

The Leipzig Trade Fair, one of the oldest and largest, has twice as many exhibits and three times the attendance of any pre-war fair. American participation has increased tenfold.

The world exposition was essentially an amusement enterprise. The financial losses of the recent expositions in London and in Philadelphia have left the field free for trade fairs. Industrial exhibits were often subordinated and, at best, were not properly organized.

The trade fair in its complete development is exclusively a business enterprise. It enables busy men to transact the maximum of business as quickly and cheaply as possible. The world expositions attracted millions of sightseers. The largest of trade fairs at Leipzig draws only about a quarter of a million. Yet the volume of business transacted there is much greater.

The appeal of the industrial exhibition of the old expositions to the average business man was slight. Days of sightseeing were required to gather information. The Leipzig Fair, in contrast, is held for one week, twice a year.

Buyers are admitted to the halls of the hundred buildings only on invitation. The mere sightseer is obviously in the way. The organization of agents and middlemen greatly assists buyers. Banking arrangements are so organized that a visitor from abroad enjoys the same facilities he would in his own city.

The Spring Fair at Leipzig will include more than 10,000 exhibits, illustrating every phase of modern industrial life. Competition is keen, since more than a score of countries display their products.

American automobiles completely dominated the last fair, forming nearly 90 per cent of all the exhibits. German builders some months ago confessed that the cheapest car made in Germany costs upwards of \$1,000. American competition, despite the tariff, is successful.

The 2,000 buyers from the United States regularly spend \$2,000,000 or more merely for the opportunity of taking advantage of the bargain prices to be found at Leipzig. The army of American buyers is obliged to expend some \$20,000,000 to justify its trip. The total purchases amount to several times this sum.

Could a great trade fair be developed in the United States today from the nucleus of such institutions as the automobile shows?—HERBERT R. JOHNSON



# "You'll find they'll create added earnings for you!"

"It's like this, Mr. Young. There are lots of devices you might buy which would be real conveniences in this business. I could try to sell you system after system to save you time and effort. I'm not trying to. What I *am* selling you is Acme Visible Records—something like a new pair of hands, a new brain, a whole new employee—something with active, creative *earning*-power, not just passive saving power."

\* \* \* \*

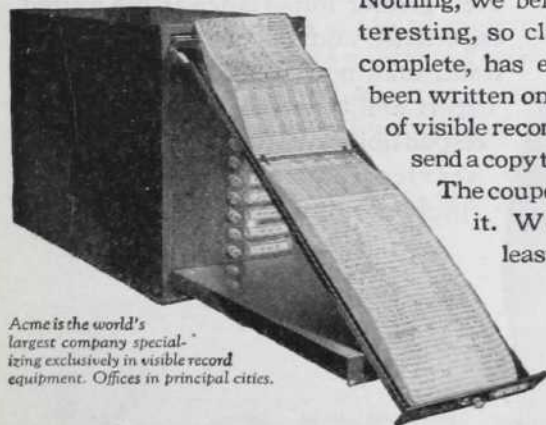
A real distinction there! A distinction which is peculiarly desirable in modern business where earning-power is the supreme test. In their ability to *earn* their right to a place in your business, Acme Visible Records are unsurpassed.

They help you to help your salesmen; to make purchases advantageously; to fill orders without mistakes and on time; to turn goods faster; to dispose of slow merchandise at a profit; and to speed up production or sales to new high levels.

How these results are obtained, with actual photographs of typical Acme installations in many types of offices, is interestingly told in our book "Profitable Business Control."

Nothing, we believe, so interesting, so clear, and so complete, has ever before been written on the subject of visible records. May we send a copy to your desk?

The coupon will bring it. Without the least obligation.



Acme is the world's largest company specializing exclusively in visible record equipment. Offices in principal cities.

# ACME

## VISIBLE

## RECORDS



ACME CARD SYSTEM COMPANY

N.B.2-28

116 South Michigan Avenue, Chicago

Gentlemen:

☐ You may send me your book "Profitable Business Control"

☐ You may send your nearest representative to see me

☐ Please write me concerning your system for handling \_\_\_\_\_ records.

NAME \_\_\_\_\_

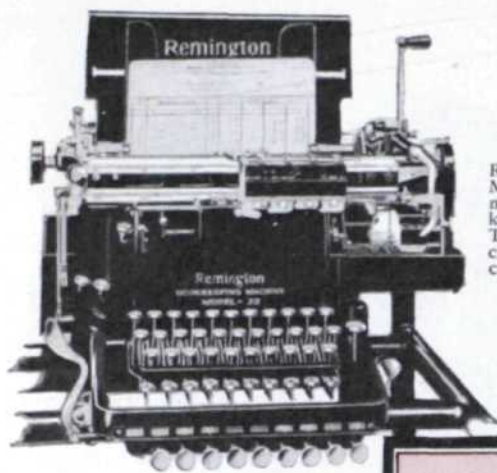
FIRM NAME \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

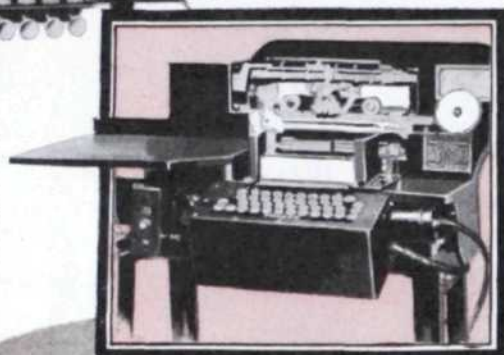


# Man power, combined to perform a



Remington Bookkeeping Machines for detailed statements, for billing, for stock keeping, for ledger posting. They do the figure work and check it automatically. You can't get inaccurate results from a Remington.

Powers Accounting Machines for every figure problem, from general accounting to sales and profit analysis. Producing automatically, in printed form, the facts of your business while they are new and vital. And the cost is only a fraction of what you pay without Powers.



**F**OR the first time in the history of business, a service is available which embraces the entire problem of office equipment. Now in one great organization, Remington Rand has brought together the outstanding pioneer manufacturers in the field . . . each selected on merit . . . the pick of the industry.

One hundred and ten trained office equipment engineers . . . fifteen thousand skilled workmen . . . developing, perfecting, building the systems and equipment necessary for business . . . Producing in twenty-seven plants more than forty-six thousand items.

Remington Rand has brought into existence a source of supply for every type of equipment business may need, with all the economies and conveniences such centralization offers. But of even greater importance is the united experience and talents of Remington Rand man power . . . the specialized, expert ability which capably assumes responsibility and renders the exact service required to solve your problem.

Dalton ten key, touch method adding and bookkeeping machines are made in models to meet the needs of any business. You know exactly what you get when you buy a Dalton. Speed and accuracy, with an absolute service guarantee.





# resources, facilities . . . needed service to business

The divisions of Remington Rand have been largely responsible for the development of the office equipment industry. Everyone knows these established names. Few offices are without equipment made by these leaders. Each company has made history in its field. Each type of equipment now available through Remington Rand has back of it years of practical development and demonstrated superiority. Remington Rand is equipped with trained men to help you choose, apply and coordinate office equipment for better results and greater economy. Remington Rand manufactures all types of equipment. Is therefore partial to none. Considers only results, deals only in results . . . results achieved through study of your individual needs. You will profit by *standardizing* on Remington Rand.

Over four thousand schooled men in the field make Remington Rand service available everywhere. You can summon it into action by reaching for your telephone.

REMINGTON RAND BUSINESS SERVICE  
374 Broadway, New York

Kalamazoo and Baker-Vawter Loose Leaf Binders and Systems for figures. Permanence, compactness, quality—scientifically adapted to modern business needs.



Library Bureau transfer cases for transferred ledger sheets, transferred or inactive figures of all kinds. Particularly adapted to vault storage. Can be stacked ceiling high, rigidly, permanently, and not one drawer will stick.

Your business figures will be available when you want them if you protect them with Safe-Cabinets. Assured, tested, definitely measured protection against fire. There is space in a Safe-Cabinet for binders, trays, filing drawers, in any shelf arrangement you desire. You can't afford not to have the assurance that Safe-Cabinets give.

# Remington Rand

## BUSINESS SERVICE INC.

REMINGTON • KARDEX • RAND • SAFE-CABINET  
DALTON • POWERS • KALAMAZOO  
BAKER-VAWTER • LINE-A-TIME  
LIBRARY BUREAU



# The Machine Back of the Machine

(Continued from page 25)

hands. And what could the Norse God Odin or the Saxon magician Merlin show of magic that equals the calm shearing of three-quarters of an inch of hardened steel from a propeller shaft for an ocean liner, or the delicate slicing of hundreds of razor blades at a time from a piece of tool steel? Not magic, but machine tools!

George Antheil, the musician, tried to express this age by an orchestra using flivver horns, sirens, riveting machines and motorexhausts. All he achieved was a deafening uproar.

But he had the glimmering of the thing in mind, though he lost it in performance. This is a machine age, and the voice of the machine is the voice of America. But that voice, though its overtones are strident, screeching, crashing, clanging, though it hammers the ear with a mad syncopation of speed, speed, speed, is really a deep diapason of tremendous melody, a symphony of triumph—man's triumph over drudgery, man's mastery of the physical forces he has bent to his purposes, man's glory in the might of his mind that has released his body from servitude.

Of these elements should the Saga of the Machine Tool be composed.

It would have somewhat the irregular unrhymed swing of Henley's "Song of the Sword." It might sound something like this (with apologies for the inadequacy of the treatment):

I, the Machine Tool,  
Shaping Man's destiny  
Out of the steel.  
Builder of magical  
Jinn of machinery,  
Giants whose servitude  
Tireless, unfaltering,  
Lifts all humanity's  
Burdens of drudgery.

I, the Machine Tool,  
Fashioning miracles  
Out of the steel,  
I, the creator  
Of looms and of dynamos,  
Maker of marvelous  
Toiling automata  
Doing Man's bidding  
And building his visions  
Into Reality.

It is I, singing  
I, the Machine Tool,  
Singing my Saga  
Of lathes and of presses,  
Punches and planers,  
Hammers and grinders,  
Whirring and screeching,  
Grinding and clanging,  
Ringing and thudding,  
Clamour whose undertone  
Sounds a great paean  
Of progress and victory.

It would be a great poem in great hands, but perhaps my essay at it may give you a little of the feeling of this industry that has been so infrequently chronicled in verse or prose.

What does the machine-tool maker's work mean to you and me—Tom, Dick, Harry and Harriet, generally known as

can afford to pay, wouldn't exist at all. Without his work and his product in the past we wouldn't have locomotives, electric cars, electric lights, telephones, motor cars or aeroplanes.

He has transferred the skill, the intelligence, the ability of master workmen to machines that will duplicate their finest handiwork, and by automatic operation has multiplied productivity to satisfy a greater demand and at a lower cost.

Without his everlasting absorption in accuracy, economy, efficiency of design and invention, the peace of modern industry would slow down to a crawl. For there's scarcely a thing you eat, wear or use that hasn't been cheapened in price and bettered in quality because the machine-tool maker has been on the job. His part in all this isn't obvious because there are usually two steps in manufacture between you and him, but he's always back of it all, and you can depend on his loyalty to his difficult and unspectacular task.

A cigarette machine rolling and packing hundreds of cigarettes every minute; a printing press slapping out thirty-two pages, printed, folded, counted, so fast that you can't keep track of them; a battery of power looms with one operator doing the work of 160 weavers; the spinning mill with one tender which spins more yarn than 45,000 hand spinners; the screw-making machine, the nail-making machine; the machine that counts, bottles, corks, labels and packs ten thousand pills a minute—all these are uncanny automata whose operations are glamorous and fascinating. Put any of them in a Broadway window and the reserves have to be called out to control the wide-eyed crowds.

On the other hand, the punches, the borers, the milling machines, the planes, the steel saws of a machine-tool battery are not particularly

interesting to watch unless you use a lot of imagination. But just let me repeat that these comparatively uninteresting machines are the tools behind the showy ones, the tools without which a rotary press, a cash register, a Whitehead torpedo, or an automatic telephone exchange couldn't be manufactured and couldn't operate.

For the machine-tool maker is really the man behind the machines. Without ma-

## QUOTABLE QUOTES of the Month

A LAW NEVER RISES higher than its fountain spring—the will of the people.

AGNES C. LAUT, *Writer.*

IF AUTOMOBILES were paid for in cash, production would be only one year behind its present schedule. In place of twenty-two million cars in the country there would today be eighteen and a half million, and the rate of production again would be only one year behind the rate under instalment buying.

JESSE I. STRAUS,  
*President, R. H. Macy & Co., New York.*

ANYTHING THAT CHILLS the free enterprise of business, or that deadens its initiative, or interferes arbitrarily with the free play of economic opportunity, is destructive both of social and economic progress.

ALBERT C. RITCHIE,  
*Governor of Maryland.*

IF YOUR BUSINESS won't support a research department—go into some other business.

EDMUND C. MAYO,  
*President, Gorham Manufacturing Co.*

PERHAPS THE MOST significant changes in our economic life has been the progress in the development of an ethical standard in the conduct of business.

ROBERT JEMISON, JR.,  
*Investment Banker, Birmingham.*

SOME DAY THE thinking people of this country will awaken to the demoralizing and devitalizing influence which paternalism is exerting in our national institutions.

LOUIS LUDLOW,  
*President, National Press Club.*

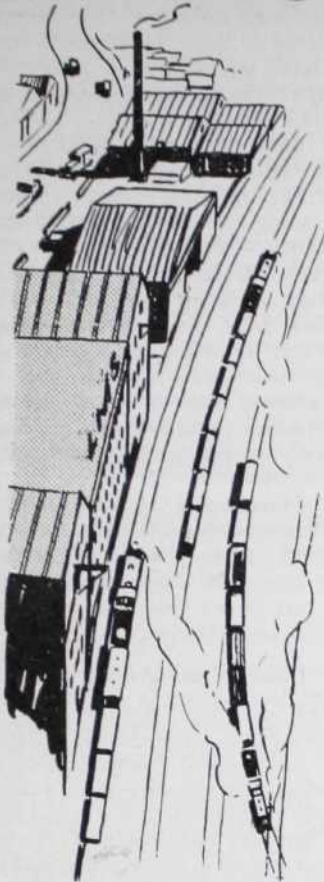
BUSINESS HAS GROWN so fast and so far that it has outgrown the caliber of many of the men who are running it.

BRUCE BARTON,  
*President, Barton, Durstine & Osborn, Inc.*

the Average Man and Woman? It would take volumes to tell that story adequately, but briefly the machine-tool maker is responsible for about two-thirds of our comfort, well-being and material happiness. Without him the whole scheme of mass production and standardization that enables us to buy motor cars, washing machines, vacuum cleaners, sewing machines, electric fans, safety razors, radio sets, and what have you? at prices we



# Selling Goods to England



## A New Plan

The British market has 44,000,000 people of high purchasing power and thoroughly accustomed to American merchandise. An attractive market.

To serve this market, Britain's greatest railroad system, the L M S, have evolved a new plan which solves efficiently many of the old problems, and sets a new record for economy.

For use in conjunction with their railroad system—which serves with its own lines 75 per cent. of the population of the country, and has direct connections with the remaining territory—at all strategic centres of population, the L M S have acquired great Terminal Warehouses. Unit space in these Warehouses can be leased at low rates for short or long terms by shippers to serve as ideal locations for branch depots, stock rooms, packing rooms, etc.

These great Terminal Warehouses are not only connected by rail with all parts of the country, but are also equipped with a complete system of road transport, horses and motor, for store-floor, local and zone deliveries.

No more complete, nation-wide system of scientific distribution could be devised. It saves handling, saves time, saves truckage, saves damage, and, above all, promotes sales, by placing the merchandise right on top of the market.

American exporters interested in the British market should not fail to send for illustrated booklet and further particulars of the L M S Marketing Plan, from—

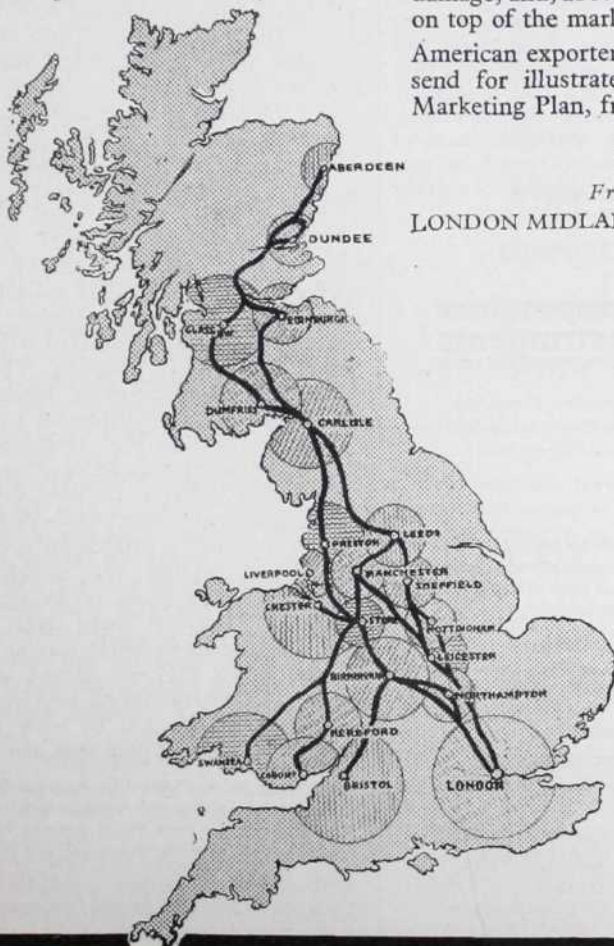
THOMAS ARTHUR MOFFET

*Freight Traffic Manager in America*

LONDON MIDLAND AND SCOTTISH RAILWAY OF GREAT BRITAIN  
ONE BROADWAY, NEW YORK

# LMS

## TERMINAL WAREHOUSES



### *Some Prominent American Firms using L M S Terminal Warehouses:*

Armour & Company; Armstrong Cork Company; Consolidated Pneumatic Products Company; Corn Products Refining Company; Gold Seal Congoleum Company; Morris Beef Company; Quaker Oats Company; Sheet Metal Products Company; Shredded Wheat Company; Swift Beef Company; F. W. Woolworth Company.



# Names—and what they mean



## Oriental Rugs

It is accepted as a standard of excellence and value in the invention, manufacture and employment of instruments for indicating, recording and controlling temperature in the home, the office, the factory, the hospital, and on the farm. In industry alone the name TYCOS symbolizes a Sixth Sense which makes possible the correct and efficient application of the five familiar senses—sight, hearing, smell, taste and touch. TYCOS on Temperature Instruments means the same as Oriental as applied to rugs.

## Tycos

For three-quarters of a century, in England and America, TYCOS Temperature Instruments have been made not so much to sell for a price as to render a service that would contribute to the advancement of health and happiness in the home and office, progress on the farm and accomplishment in science and industry. In the great TYCOS organizations of engineers, scientists, executives and artisans are men and women who have devoted their lives to this work, many of them following in the footsteps of their parents who in turn dedicated themselves to the perfection of devices for indicating, recording and controlling temperature; for forecasting the weather; for guiding the explorer and hunter through uncharted forests; for a thousand uses that touch humanity in some manner. So experienced are members of the TYCOS organization in meeting the needs of the past that it is able to meet new demands that are the outgrowth of industrial and scientific development. It matters not what your problem is, so long as it pertains to temperature or weather, TYCOS engineers have the solution that is yours upon request.

The priceless things in this world are those not made for a price—not made to sell but to keep. Priceless indeed are those objects of art and domestic use that have been made to satisfy the heart hunger of ancient races for beauty; to record an epoch in family, tribal or national life; to send a prayer to the God of a people; to excel in sheer artistry, design, workmanship and beauty; to relate thoughts that cannot be expressed in words; in short, to create something so fine that age will add to its luster and the appreciation of an advancing civilization will increase the desire to possess and cherish. Such are Oriental Rugs into which countless thousands of humble weavers from seven to seventy have tied with ever-enduring threads and strands the hopes, aspirations and prayers of all history. It is worthy of note that some names begin by being merely tags to identify a product and are soon forgotten. Other names, like Oriental Rugs, acquire, through years of superlative merit in the product itself, a personality, a definite measure of value that is quickly recognized. Such a name, for instance, is

## Tycos Temperature Instruments

INDICATING - RECORDING - CONTROLLING

### Office Thermometers

An aid in promoting human efficiency.

### Bath Thermometers

To enable you to get the most good from your bath.

### Home Sets

Bake Oven Thermometer, Candy Thermometer, Sugar Meter. The secret of accurate results in cooking.

### Wall Thermometers

To help you maintain a temperature in your house conducive to good health.

### Quality Compasses

To show you the right way in unfamiliar country.

### Fever Thermometers

A necessity in every home.

### Stormoguides

Forecast the weather twenty-four hours ahead with dependable accuracy.

### Hygrometers

To enable you to keep the humidity of the atmosphere in your home correct at all times.

### FOR THE MEDICAL PROFESSION

Sphygmomanometers, Pocket, Office and Recording types. Urinalysis Glassware. Fever Thermometers.

## Taylor Instrument Companies

ROCHESTER, N.Y. U.S.A.

CANADIAN PLANT  
TYCOS BUILDING  
TORONTO

MANUFACTURING DISTRIBUTORS  
IN GREAT BRITAIN  
SHORT & MASON, LTD., LONDON

chine tools the manufacture of modern machinery would be so slow and so expensive that it wouldn't pay. And, as a matter of fact, it would be utterly and completely impossible to make most modern machinery by hand. No imaginable assemblage of hand labor could furnish the power, and no rule of thumb could even approximate the accuracy of measurement necessary.

Yet these men who build machine tools are really contributing a very great portion to the good things which you and I enjoy. In the matter of values, for instance, one \$14,000 machine tool in an automobile factory saved \$19,000 in operating costs in one year. Milling machines have increased the quantity production of vacuum cleaner bodies twenty times, and new machine tools have reduced the time for machining motor-frames from fourteen minutes to forty-two seconds. These are only isolated instances of such savings in thousands of factories.

Machine-tool improvements have made it possible to produce the modern automobile at a price from a half to a fifth of the cost fifteen years ago, and the automobiles are better.

### Public Gets the Benefit

MOST of these savings have been passed on to the public. High efficiency, high-speed machine tools have reduced overhead, increased turnover, cut wage cost but increased actual wages.

The ordinary man has been able to enjoy these results in lower prices and more and better aids to comfort and happiness. The manufacturer has felt the difference in increased profits, his labor in better wages and easier work.

And the machine toolmaker, who made it possible, is satisfied with a fair return—7 per cent has been mentioned—for his contribution to all civilization. He's an idealist and responds more quickly to a fair regard of his worth than to mere material gain. And there's a further increment beyond the acknowledgment of what he has accomplished, which means more to the industrial world in greater constructive progress. The machine-tool builder requires funds, not for himself, but for engineering research and study, for a further development of these machines that build machines.

Something ought to be done to make the machine-tool maker's share in the results of his work a little more generous. But nobody except the machine-tool maker himself is going to do anything about it. They care more about doing their job, and more about making sagas in steel than they do about singing them. The nearest they'll ever come to figuring in a saga will be some inadequate little attempt like this one:

**They'll go on working like bees in clover,  
Frequently making the whole world over;  
And just as the bees don't get the honey,  
Machine-tool makers won't get the money.**

But if this persuades a few thousand of you to "Give 'em credit," it may rank as a bit of a saga after all.



## Eighty Years of Gold

(Continued from page 19)

if the metal with which it may be re-deemed is known to be ever ready to serve its purpose.

Therefore the quantity of money available in the world has depended on the quantity of satisfactory metal in hand as a basis for it. The first money was made of copper, but that metal destroyed itself as a medium of exchange by becoming too cheap.

Silver was the chief money metal for 2,000 years before James Marshall, and the quantity of money in the world was largely based on the amount of silver available. And there was a painful shortage of silver. Civilization advanced slowly because it lacked money. The first great demonstration of the effects of increased money supplies was given when Spain brought back shiploads of silver from Mexico. The greatest era of development the world had ever known followed, and Spain, with abundant money, came into the day of her dominance.

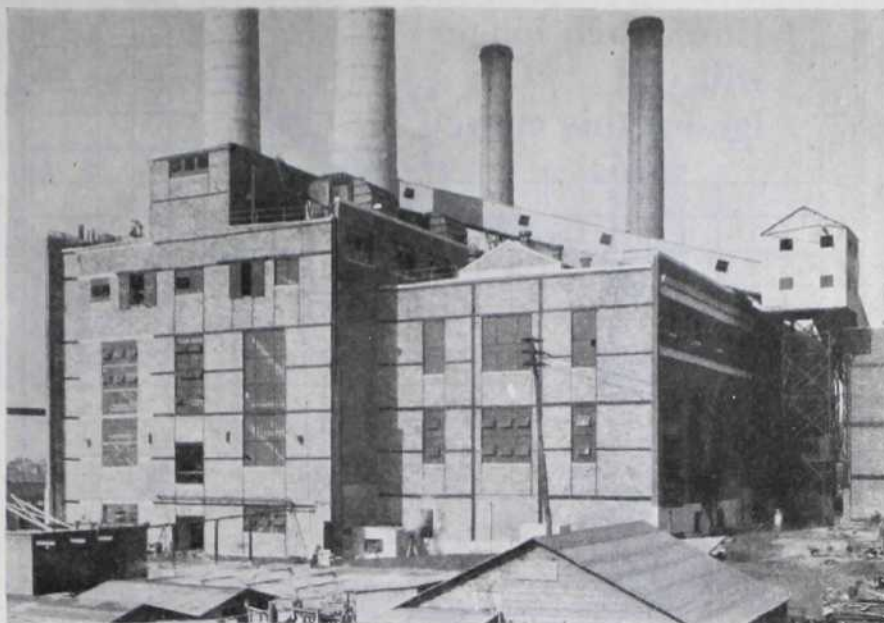
### Gold Brought Prosperity

THE SECOND demonstration of the effect of an abundance of money came with the eighty years of the outpouring of gold. The nations shifted to the use of gold as a basis for their money. It became the standard practically all around the world. As the streams poured forth they flowed naturally into the treasure vaults of nations. The gold was used as money or was made the basis for the issue of paper representing it. As gold became plentiful so did money. Innumerable enterprises that had been sleeping through the generations were awakened. The age of stupendous development has resulted.

Yet gold as a basis for money has one admitted fault—it fluctuates in value. This means that the currencies of nations, based on gold, will change in purchasing power. If gold becomes too plentiful, currencies will become cheap. If it becomes scarce, they will be dear. The future purchasing power of world currencies will, therefore, depend on the continued production of gold.

And the world is quite well known from the standpoint of gold possibilities. I have sat with groups of mining engineers time and again in New York or London, and we have gone over the map of the world, asking what were the mineral possibilities here and there. In a single group of this sort it is hard to find a spot that has not been carefully covered. Wherever there are suspected gold possibilities technical expeditions have been sent.

For a generation now, financing has been always ready for the examination of any new field. These world-combing mining engineers will tell you that there is little chance that another Rand or another California will ever be discovered. They will tell you that the era of great gold discoveries is past. They will go



Reeves Avenue Station, Norfolk  
40,000 H. P. Addition and Improvements

## More Power for Virginia Electric & Power Co.\*

EXTENDING and modernizing power stations usually must be done while stations are operating. This work, requiring both extensive operating and long construction experience, is an important part of Stone & Webster service.

\*Serves Tidewater Virginia and Northeast North Carolina

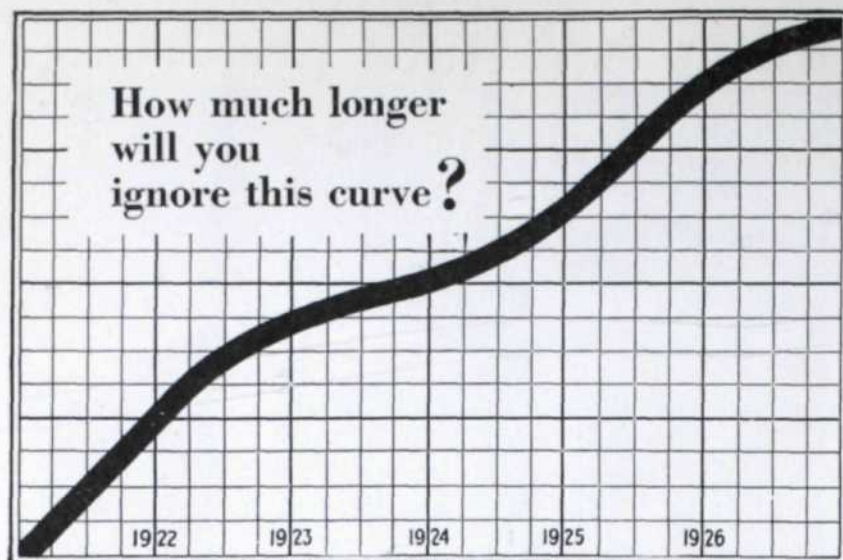
## STONE & WEBSTER INCORPORATED



BOSTON, 49 Federal Street  
NEW YORK, 120 Broadway  
CHICAGO, First National Bank Bldg.

PITTSBURGH, Union Trust Bldg.  
SAN FRANCISCO, Holbrook Bldg.  
PHILADELPHIA, Real Estate Trust Bldg.





# Dictate

¶ Realize that the American people have struck a change of pace. ¶ This curve pictures the rapid rise in the popular use of dictating machines during the past few years. Firms all about you have provided their executives with Ediphones for business action in writing because they are just as necessary as telephones—and much easier to use. ¶ The gains were too big to be ignored. ¶ Find out for yourself that your executives are losing a month in a year when they do not lift the receiver of an Ediphone—anytime—and express the thoughts on the tips of their tongues. And what it wastes to write letters twice, in a notebook and in type. ¶ Telephone “The Ediphone,” your city, for quick action . . . . .



Write on your business letterhead for our new book “An Easy Way To Chart Your Correspondence,” telling how privately to obtain this valuable office data in a new way.

THOMAS A. EDISON, INC.

WORLD-WIDE SERVICE

LABORATORY & GENERAL OFFICES, Orange, N. J.

LONDON OFFICE, 164 Wardour St., London, W. 1.

# Ediphone

Edison's New Dictating Machine

over the gold-producing world, section by section, and estimate the future possibilities. They will show that the United States reached the maximum in its gold production when it yielded \$101,000,000 in 1915. Ten years later that production had run down to scarcely more than half that amount, \$52,000,000. It is generally conceded that the palmy days of gold production in the United States are past. The great mass of her production has been placer, and these deposits have been pretty well worked out. The United States will produce less gold in the future than in the past.

It has long been the habit to look hopefully to Mexico as a source of gold, but that country has contributed little of the yellow metal. Her great wealth in precious metals has, in the past, been in silver and in the future will probably be the same.

South America has been quite thoroughly prospected and has yielded comparatively little gold. It is not regarded as having important gold prospects.

Australia, like the United States, is admitted to have passed its zenith. Its production of the future is not likely to approach that of its past.

The Rand, time and again the yielder of about half the annual gold of the world, is a limited area that has, for decades, been very intensively mined. Its huge production has been holding its own but can hardly be expected to continue to do so. The mining is now being done at great depths. The falling off in the Rand is likely to be sharp and material in the next few years.

## Hope in Canada and Siberia

A BRIGHT spot on the gold map lies in Canada. In half a dozen years beginning with 1920, Canadian production increased gradually from \$15,000,000 a year to \$35,000,000. These amounts are not so large as to have a great effect on world markets but indicate possibilities.

Siberia is probably the most promising of the potential gold fields. For a long time before Russian conditions grew chaotic that region yielded from \$20,000,000 to \$30,000,000 a year. The region around Lena, Siberia, is most promising. When stable government is reestablished this part of the world may respond to development.

Generally speaking, however, gold in any region yields itself up most readily and abundantly when that region is new. Gold rushes die out; gold yields fall off. One section after another follows the United States and Australia into a decline. New fields are being found with less frequency. The easy gold of the world has largely been produced. Most of that which is to follow will be from low-grade gravels and ore lying at greater depths. The gold of the future, I believe, will come forth laboriously and more slowly than in the past. It seems to me that it would be safest to figure money conditions of the future on this hypothesis.



# FOR MEN who want to become independent in the NEXT TEN YEARS



IN THE winter of 1938 two men will be sitting in a downtown restaurant.

"I wonder what's going to happen next year," one of them will say. "Business is fine now—but the next few years are going to be hard ones, and we may as well face the facts."

The man across the table will laugh.

"That's just what they said back in 1928," he will answer. "Remember? People were looking ahead apprehensively—and see what happened! Since then there has been the greatest growth in our history—more business done, more fortunes made, than ever before. They've certainly been good years for me' . . ."

He will lean back in his chair with the easy confidence and poise that are the hallmark of real prosperity.

The older man will sit quiet a moment and then in a tone of infinite pathos:

"I wish I had those ten years back," he will say.

TODAY the interview quoted above is purely imaginary. But be assured of this—it will come true. Right now, at this very hour, business men are dividing themselves into two groups, represented by the two individuals whose words are quoted. A few years from now there will be ten thousand such luncheons and one of the men will say:

*"I have got what I wanted."*

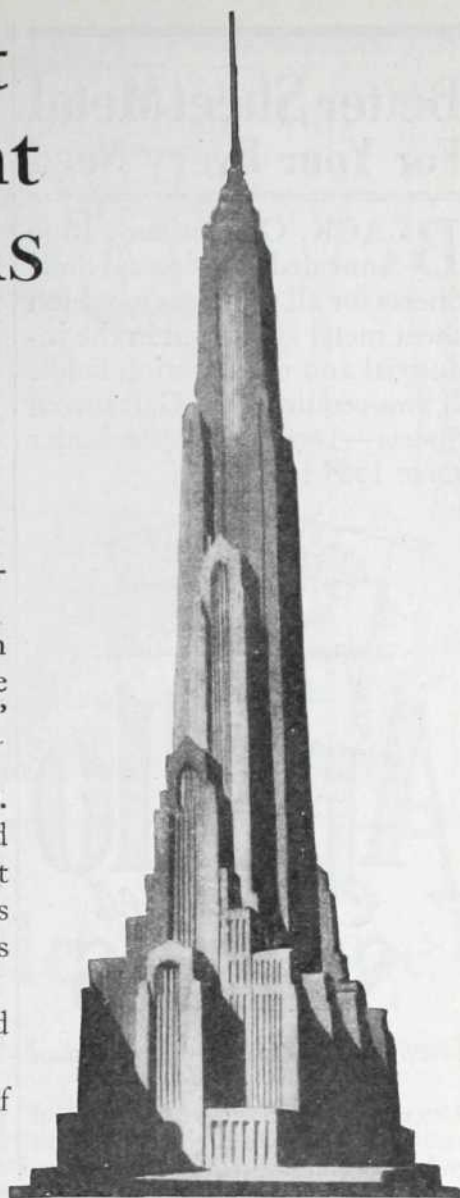
And the other will answer:

*"I wish I had those years back."*

In which class are you putting yourself? The real difference between the two classes is this—one class of men

hope vaguely to be independent *some-time*; the other class have convinced themselves that they can do it within the next few years. Do you believe this? Do you care enough about independence to give us a chance to prove it? Will you invest one single evening in reading a book that has put 300,000 men on the road to more rapid progress?

This book costs you nothing—and for a good reason. It is worth only what you make it worth. It explains how for more than nineteen years it has been the privilege of the Alexander Hamilton Institute to help men shorten the path to success; to increase their earning power;



*"Since then there has been the greatest growth in our history—more business done, more fortunes made, than ever before."*

to make them masters of the larger opportunities in business.

"FORGING AHEAD IN BUSINESS" is a cheerful, helpful book. It is yours for the asking. Send for it. Measure yourself by it. Look clearly, for a few moments, into *your* next few years. Whether or not you will follow the path it points is a matter that you alone must decide.

## Alexander Hamilton Institute

Executive Training for Business Men



IN CANADA, address the Alexander Hamilton Institute, Limited, C. P. R. Bldg., Toronto

IN ENGLAND, 67 Great Russell St., London  
IN AUSTRALIA, 11c Castlereagh St., Sydney

ALEXANDER HAMILTON INSTITUTE  
485 Astor Place New York City

Send me the new revised edition of "Forging Ahead in Business," which I may keep without charge.

Signature \_\_\_\_\_ Please write plainly

Business

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## Better Sheet Metal For Your Every Need

**B**LACK, Galvanized, Blue Annealed, and Special Steel Sheets for all purposes to which sheet metal is adapted in the industrial and construction fields. If you require good Galvanized Sheets—remember the leader since 1884 has been



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APOLLO-KEYSTONE Galvanized Sheets are the highest quality sheets manufactured for roofing, siding, gutters, spouting, ventilators, cornices and all similar uses. Keystone Copper Steel also excels for tanks, flumes, culverts, grave vaults, and all installations where lasting service and resistance to rust are important factors. This alloy material has proved its superiority. Look for the KEYSTONE in trade mark.

For Tin Roofs for residences and public buildings, use Keystone Copper Steel Roofing Tin Plates—the highest quality produced.

This Company is the oldest and largest manufacturer of a complete line of Black and Galvanized Sheets, Full Finished Sheets, Automobile Sheets, and Special Sheets for all known uses; also Tin and Terne Plates adapted to every requirement. Sold by leading metal merchants. Send for FACTS and ROOFING TIN booklets—they contain information of particular interest to you.

AMERICAN SHEET AND TIN PLATE COMPANY  
General Offices: Frick Building, Pittsburgh, Pa.

# AMERICAN SHEET STEEL

*Products of QUALITY and Service!*

*When writing please mention Nation's Business*

## A Storehouse of Business Helps

(Continued from page 32)

ing house for science in America, it is, as Herbert Hoover has finely said, "peculiarly the architect of scientific investigation in our country."

In this busy citadel of science were incubated no less unique institutions of direct educational and economic importance to the American people. These projections of the parent spirit include the Weather Bureau, the Fish Commission, the National Museum, the Bureau of American Ethnology, the International Exchanges of Scientific Literature, the Scientific Library, the International Catalogue of Scientific Literature, the Astrophysical Observatory, the National Zoological Park, and the National Gallery of Art.

### Aids to the Institute

**E**NRICHED and broadened with congressional appropriations and occasionally with private means, these services have in part outgrown parental care. But to the Smithsonian must be credited the first faith in their usefulness. An enlightened public demanded the enlargement and continuance of the weather reporting service fostered by Henry and the fisheries work inaugurated by Baird. These two children now look only to Government as their guardian, but the others still take all direction and guidance from their mother—a congressional tribute to the wisdom and economy of her administration.

In the museums is a substantial exposition of the making of this nation—precious souvenirs of its youth, revealing evidence of growth from every field of attainment. Legend and romance give give imperishable fame to the Indian, but a more convincing record of his life is in the ethnologic exhibits. The books that come and go for the advancement of science need no extolment of their virtues, though the lay tongue may falter in pronouncing judgment by their titles. And where is the American who would forego the national "Zoo"? Certainly his reluctance would be the greater for the additions obtained through Walter Chrysler's generosity. Usefully grows the national art gallery. Impressive in its appraisal of Smithsonian guardianship was Charles Lang Freer's decision to place his rare collection of Oriental and American art in the keeping of the Institution.

The day of the garret scientist has gone forever, yet there are men in our times who find profound satisfaction in knowledge for its own sake. Out of the desire to know how rarefied gases could conduct electricity came the X-ray. But the public is still inclined to look on pure science as a sort of poor relation to well-kept applied science. To get contributions it has been the custom to suggest that pure science was on the point of becoming impure.

It may be that the pure researcher

prides himself too much on his detachment from worldly things and is too quick to refuse admission to any who bear the hope of material gain. Or it may be that he knows nothing of the fine art of ballyhoo. Perhaps it is his own faint praise that has dimmed his virtues in the public eye. But it should not be difficult to show that research pays national dividends.

In the field of astrophysics, for illustration. Who could deny that the world would be better off for knowing the influence of the sun's rays on child health? Or the ways in which they promote plant growth? Or their use for power? Or their value in foretelling weather? And where is the man who now would mock those pioneer students of the humble fly and the still humbler louse? The fetters of our ignorance are less binding for the focus of science on bacteria as carriers of disease.

It is the judgment of scientists that there cannot be too much pure science. The fixation of nitrogen was accomplished by the engineer, but the ground work was done by a man who discovered the nitrogen atom. The profit motive is assurance enough that new discoveries will be applied. But we need to know more fundamental facts about the properties of even the commonest chemical elements, about the chemistry of plant and animal cellular growth, about the state of the upper atmosphere, and about the mechanics of water for relation to river, harbor, and power projects. In those fields, the unknown still beckons the investigator.

Those prospects are engaging. They are now distant for lack of means to give them substance. There may be novelty, but there can be little of national pride at seeing the Smithsonian pass the hat. For that it must do. Whatever the donations, they will go 100 per cent to research. The buildings are adequate and the facilities ample.

### Enriched by Brains

**I**T IS a little strange that the faith nourished in another land should go a-begging here. Yet, if material enrichment has not been the Institution's usual lot, its devoted secretaries have deserved the ungrudging admiration of their colleagues. Henry, Baird, Langley, and Walcott held a kind of premiership for science in America. These men performed prodigies with small incomes.

The plant they built endures today. In organic mechanism it is much the same as it was when John Quincy Adams induced the Congress to grant the original charter. The men who man it still have "the simplicity to wonder, the ability to question, the power to generalize, the capacity to apply." To them we may confidently turn for more of the fundamentals by which civilization is advanced and mankind informed of the underlying harmony of the universe.



## Wholesalers Meet to Find Facts

**W**HERE does the wholesaler stand in the changing economy of distribution? What services does the wholesaler perform in various trades? What is the means of determining a profitable trading area, and how can unprofitable orders be cut?

These are among the questions to be discussed and probably answered at the National Wholesalers' Conference to be held in Washington, February 14 and 15, and called by the National Chamber. W. M. G. Howse, president of the Johnston and Larimer Dry Goods Company, Wichita, Kansas, president of the National Wholesale Dry Goods Association and chairman of the Advisory Committee of the National Chamber's Domestic Distribution Department, will act as chairman.

Chain stores, mail-order business and direct selling have had a tremendous influence on the wholesale situation. These forces have reacted differently upon different sections of the wholesale trade. In truth, the wholesalers of the United States face a somewhat indefinite future. There is uncertainty concerning the exact situation in the wholesaling field at the present time, and there is even greater uncertainty as to what developments may be expected.

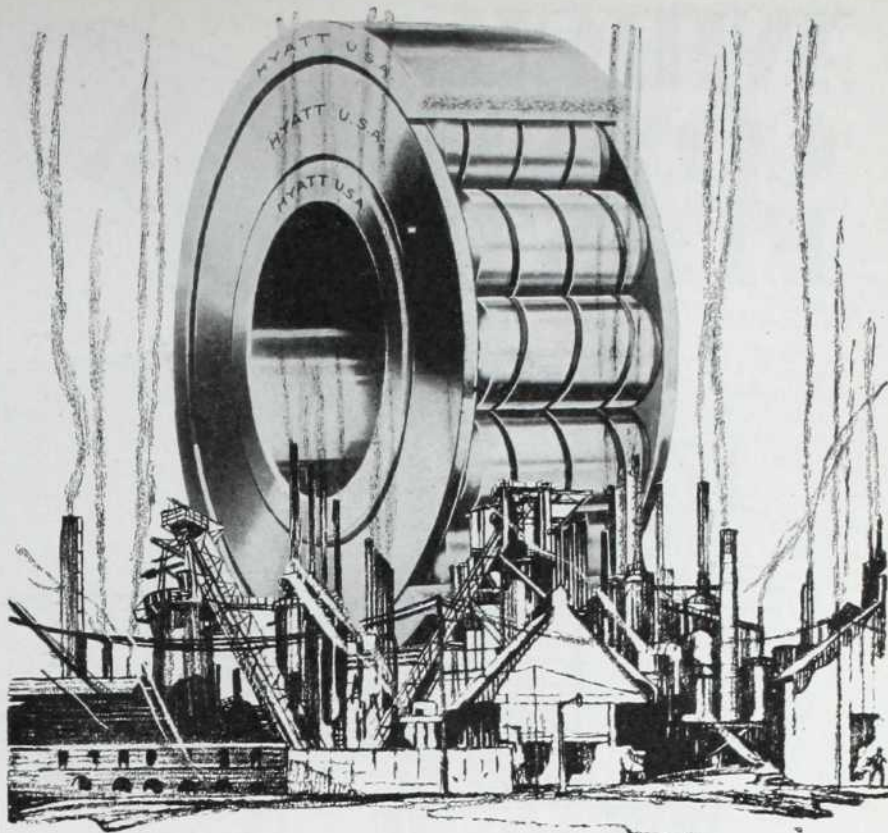
### Change in Wholesaling

**I**T IS evident that wholesaling in many lines is profoundly disturbed. Wholesalers themselves hold widely divergent opinions. In different branches of trade, they are confronted with a variety of conditions, which they are meeting in a variety of ways.

What functions are performed by wholesalers, and how are they performed? What is the place of wholesaling in the distribution of the country's merchandise, and what is its relation to other branches of industry? These questions were answered without much difficulty in 1918. In 1928, instead of answers, there are speculations, opinions. Wholesaling has become a "dark spot" in distribution.

The variety of methods which has resulted from widespread distribution changes is so great that a full exchange of information by wholesalers is the most direct and certain means for arriving at a true picture of wholesaling as it exists and functions today. By defining and clarifying the scope of wholesaling throughout industry, the Conference should be attended by economic results of the widest consequence and of great benefit.

Among the topics that will be discussed are financing, anticipation and provision of market needs, warehousing and its place in economical distribution, functional analyses of wholesale services, group buying, department stores and their effect upon wholesaling, economic



## A Miracle of Steel!

**N**O greater tribute can be paid to the Hyatt Roller Bearing, and its anti-friction properties, than the confidence with which all Industry is using it for the brute tasks.

Giant steel mill equipment, with its extreme demands, huge cranes, steam shovels, railroad journals, and the variety of conveying, mining, farming and automotive equipment are depending with unwavering satisfaction on the easy turning Hyatt rollers to carry the loads smoothly, unflinchingly, permanently.

Practically frictionless and wearproof, the Hyatt bearing is aptly termed "Industry's Miracle of Steel." Many of the first Hyatts built are still going strong, after 37 years of flawless performance.

Hyatt installations save power and lubricant. They give longer life to gears, belts and the entire equipment, wherever applied. They help reduce labor costs, shutdowns and delays. They improve production and output.

Leading manufacturers in every line have adopted Hyatt Roller Bearing as standard applications in their own plant equipment as well as in the products they build.

There is security in that familiar phrase—"Equipped with Hyatt Bearings."

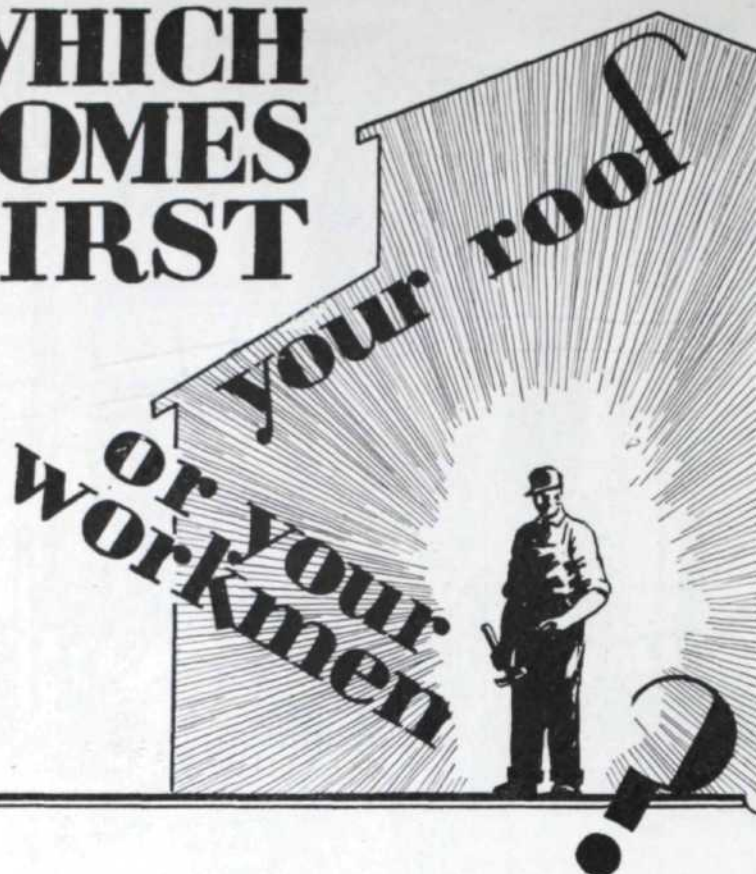
HYATT ROLLER BEARING COMPANY  
Newark Detroit Chicago Pittsburgh Oakland

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PRODUCT OF GENERAL MOTORS

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# WHICH COMES FIRST



**ARE** you paying attention to the comfort of your workmen? Are you concentrating heat at the roof and disregarding the health and efficiency of those who work under it? Many factory owners are, but not those who have installed Thermomine Unit Heaters.

The Thermomine Unit Heater is the modern industrial heater designed to replace or supplement existing cast iron radiation and pipe coils. Unlike the latter, however, Thermomine Unit Heaters deliver and keep heat where it is needed — in the working area. Heat is not allowed to accumulate at the roof as is the case with cast iron radiation.

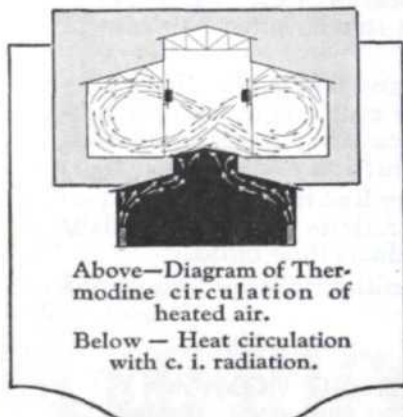
Instead, it is projected down from the heaters into the occupied zone, finally rising to the plane of the heaters where it is again drawn in and reheated. Efficient, economical heating with little heat loss. And furthermore, Thermomine Unit Heaters cost less to install than the old-fashioned cast iron radiation.

Write us today for Catalog No. 127 containing full information on Thermomine Unit Heaters to heat any size space.

**MODINE MANUFACTURING CO.**  
(Heating Division)  
1710 RACINE ST. RACINE, WIS.  
Branch offices in all large cities



Thermomine Unit Heater No. 701 — there's a Thermomine for every size space.



Above—Diagram of Thermomine circulation of heated air.

Below — Heat circulation with c. i. radiation.

# TherModine Unit HEATER

For Steam or Hot Water Heating Systems

When writing to MODINE MANUFACTURING CO. please mention Nation's Business

aspects of private brands, style changes, small-order buying coordinated with demand; business analyses of economic trading areas, of selection of customers based upon profitable operation, of profitable minimum size of orders and shipments, etc.

The conference will be welcomed by Judge Edwin B. Parker, chairman of the Board of the National Chamber. Mr. Howse will speak on the "Aims and Purposes of the National Wholesalers' Conference." Mr. O. H. Cheney, well-known banker, will also be on the program.

Presidents of 36 wholesale trade associations have been asked to attend the Conference and also to suggest other men who would be interested in attending and who would contribute to the discussion. While it is desirable that anyone interested in distribution attend, discussion will be limited to wholesaling problems.

The National Wholesalers' Conference supplements the National Distribution Conference held under the Chamber's auspices in 1925. It is seen as an extension into a special field of the intensive study of distribution inaugurated by the general conference and the six committees which grew out of it.

In discussing the purposes of the Conference, Manager Dodd of the Domestic Distribution Department, states "that as the result of this Conference, wholesalers will have a clearer picture of their functions and a better conception of what the future holds. We believe also that the public and the business world will understand these functions more definitely and specifically than ever before."

## \$10,000,000 Station Group for Boston

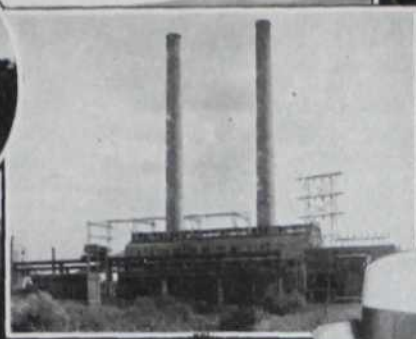
**P**LANs have been announced and work begun on a new ten-million dollar station group in Boston. The project marks a further step toward complete utilization of railroad terminal property, similar to the Grand Central building program in New York.

The new station group will occupy the site of the present North Station of the Boston & Maine Railroad. It will include, besides the station proper, a great convention coliseum and sports arena, a hotel, a fourteen-story public office building, and a distributing terminal.

The size of the units is indicated by the fact that the station waiting-room will seat two-thirds more than the Grand Central Terminal in New York.

Provision is to be made in the station proper for the exhibition of New England's agricultural and industrial products. Large, illuminated display spaces along several walls will be devoted to this purpose. The coliseum will also fill a need in Boston, frequently expressed by the Chamber of Commerce, for an auditorium large enough to accommodate the largest conventions.





**MR. C. S. ROWE**  
Treasurer of The Consumers  
Power Company Says:

"In response to your inquiry as to our experience with Standard Registers, it gives me pleasure to say that the machines, of which we have approximately fifty in the State, have given us entirely satisfactory service. . . . It seems to me that the one outstanding thing in our experience with The Standard Register Company is the service which has been given us in the way of keeping our machines up to date at all times . . . in the prompt delivery of additional equipment as needed . . . in the prompt delivery of stationery . . . which we have found to be 100% accurate as to printing, numbering and registration."

## Perhaps You Can Profit From This Experience

**I**N the fact that The Consumers Power Company, one of the largest operating companies in the Middle West, with headquarters in Jackson, Mich., uses fifty Standard Registers is perhaps a suggestion to smaller concerns in electrical and other lines of retail business—a thought possibly that they can profit from the experience of this big company in the handling of retail merchandise sales.

The Consumers Power Company which serves practically the entire State—with offices in most of the principal cities—does an enormous business in retail merchandise and coke in addition to its power and light supply business. Naturally, this involves considerable record-keeping and, if not organized to a fine point of efficiency to make for speed, insure absolute accuracy and maintain an accurate record of cash and charge sales, deliveries, etc., would constitute a serious problem which would greatly

increase operating overhead and customer complaints.

Fifty Standard

Register Systems, which are used in all of their local offices, however, enable this company to handle this phase of its business with a minimum of work or worry. Let us tell you how Standard Registers serve The Consumers Power Company, how they eliminate careless mistakes, safeguard against inaccuracy, speed up business routine and hold overhead to a minimum in every type of business, large and small—how they will quickly pay for themselves in your business. Write

THE STANDARD REGISTER COMPANY  
262 Albany Street, Dayton, Ohio

**REMEMBER:** STANDARD Autographic Registers may be used for either roll or "anyfold" printing and, regardless of type of form used or the type of register, the STANDARD "Kant-Slip" pinwheel feature makes it absolutely impossible for additional

copies of any form (up to six), to get out of alignment with top sheet. They must be the same, line for line, word for word.



# Standard

Roll and Anyfold Systems for Autographic Registers and Billing Machines

THE STANDARD REGISTER COMPANY, 262 Albany St., Dayton, Ohio.

Without obligation, please tell me about the advantages of STANDARD REGISTER SYSTEMS, and how they quickly pay for themselves in uses checked below:

- ☐ Sales Records
- ☐ Invoices
- ☐ Bills of Lading

- ☐ Delivery Receipts
- ☐ Production Orders
- ☐ Express Receipts

- ☐ Receiving Records
- ☐ Telephone Orders
- ☐ Daily Summary Records

- ☐ Charge Sales Slips
- ☐ Stock Requisitions
- ☐ Packing Slips

- ☐ Shipping Orders
- ☐ City-County Systems

NAME .....

ADDRESS .....

CITY .....

STATE .....



# The Buncombe of Postal Costs

By THOMAS W. HOWARD

**MORE business in government? Yes, but when government undertakes to be businesslike it doesn't always succeed.**

The Post Office undertook to put its affairs on a sound cost-accounting basis, but with what results? The vagaries of the system were plain to Mr. Howard, the cost-accounting expert of the National Chamber of Commerce, and here he has made them plain to the many readers of this magazine whose business depends upon the post office.

**J**AMES NEWTON, president of the Postal Company of America, was worried. He tapped nervously with a pencil as he waited for his executive committee to take seats around the conference table. Then he arose and said: "Gentlemen, I wish to dispense with the consideration of some of the formal reports that we have usually considered at our annual meetings and take up the study of our operating deficit. I regret to have to say that the year's operations have closed with a deficit amounting to \$40,000,000.

"I am sure that this situation will come as an unwelcome surprise to you, for we had anticipated a surplus. As a matter of fact we should have had a surplus if the salary increases which our board authorized, amounting to \$65,000,000, had not been granted."

"I thought," interrupted a member of the committee, "that last year we provided for these salary increases by increased rates on several classes of mail."

"Yes, that is true," replied President Newton, "and in the establishment of the new rates our board was guided by our cost ascertainment report which had been so carefully prepared—and incidentally at a cost to the company of a half million dollars.

## Higher Price Brings Less Income

**T**HAT report, you will recall, indicated the average cost of (paid) first-class mail to be one and a half cents per piece. Influenced by that fact, the rate on private mailing cards was increased from one to two cents, but I regret to advise that our revenue on private mailing cards has decreased from twelve millions to four millions. On advertising circulars—third-class mail—the rate was increased from one to one and a half cents and the volume has dropped off 943,000,000 pieces, or 20 per cent."

"Well, that doesn't prove that the ascertainment report is wrong," broke in a member of the committee. "You will remember, Mr. Newton, that you and your predecessors, and indeed the committee for years has advocated the establishment of our postal rates on the

basis of the costs of the various classes of service."

"But I am afraid, gentlemen—in fact, I am convinced that we shall have to face an unpleasant truth."

"Do you mean," spoke up the inquiring committeeman, "that there are errors in that report that make the results useless? It was my impression that the work was undertaken only after the most painstaking preparation and with the utmost care in its execution."

"That is true, Mr. Brown," continued the president. "The difficulties are fundamental and involve the utility of the results secured rather than their mathematical accuracy. You will recollect that our cost report purported to show gains and losses as follows:

Operating Losses—	
Second-class mail.....	\$75,000,000
Third-class mail.....	16,000,000
Fourth-class mail.....	7,000,000
Franked and penalty matter	7,000,000
All other services.....	15,000,000
<b>Total .....</b>	<b>\$120,000,000</b>

Operating Gains—	
Paid first-class mail.....	\$80,000,000
<b>Net loss on operations.....</b>	<b>\$40,000,000</b>

"I wish to lay before you, gentlemen, specifically, a few of the principal ways in which cost ascertainment as we have approached it, is deficient for rate-making purposes.

"First, I wish to refer to the matter of joint costs as they are called. Mr. Baird, who is a new member of our executive committee, is also chairman of the board of several large chemical companies. He has the problem of joint costs in various ways in the chemical business. I am going to ask him to give you an illustration."

## Arbitrary Cost-Finding

**I** SHALL be glad to do so," said Mr. Baird. "The cottonseed crushing business, gentlemen, presents a case in point. In the crushing of cotton seed we secure not only cottonseed oil, but also linters, meal and hulls, each a product of considerable value. We cannot divide the

costs of the seed itself and the expenses of crushing among these four products except by an arbitrary method. Let me illustrate. Assume that the cost of the seed is \$50 per ton and the expenses of operation of the plant are \$10 per ton. A total cost to secure the four products is \$60 per ton.

"Now, suppose that we apportion this cost to the four products on the basis of the yield of the several products by weight. This, as I understand it, is identical in principle with the methods you have employed in the postal cost ascertainment. I recognize, of course, that you have used pieces, space occupied, delivery time and other units, but the principle is the same.

"The figures I give you are approximately correct, though for ease in computation and to simplify the illustration I shall employ round figures. Let me present the yield in pounds that we secure of each of these four products from every ton of cotton seed and the cost apportionment based upon the yield. The figures are as follows:

Product	Yield in		Cost apportionment
	pounds	per cent	
Oil .....	300	15	\$9.00
Meals ....	1,000	50	30.00
Hulls ....	600	30	18.00
Linters ...	100	5	3.00
<b>Totals ..</b>	<b>2,000</b>	<b>100</b>	<b>\$60.00</b>

"Now, the market value of the several products and the comparisons with the apportioned costs as above are:

Product	Pounds	Price per lb.	Apportioned	
			Market value	Cost
Oil .....	300	\$0.10	\$30.00	\$9.00
Meal .....	1,000	.02	20.00	30.00
Hulls .....	600	.005	3.00	18.00
Linters ...	100	.10	10.00	3.00
<b>Totals... 2,000</b>			<b>\$63.00</b>	<b>\$60.00</b>

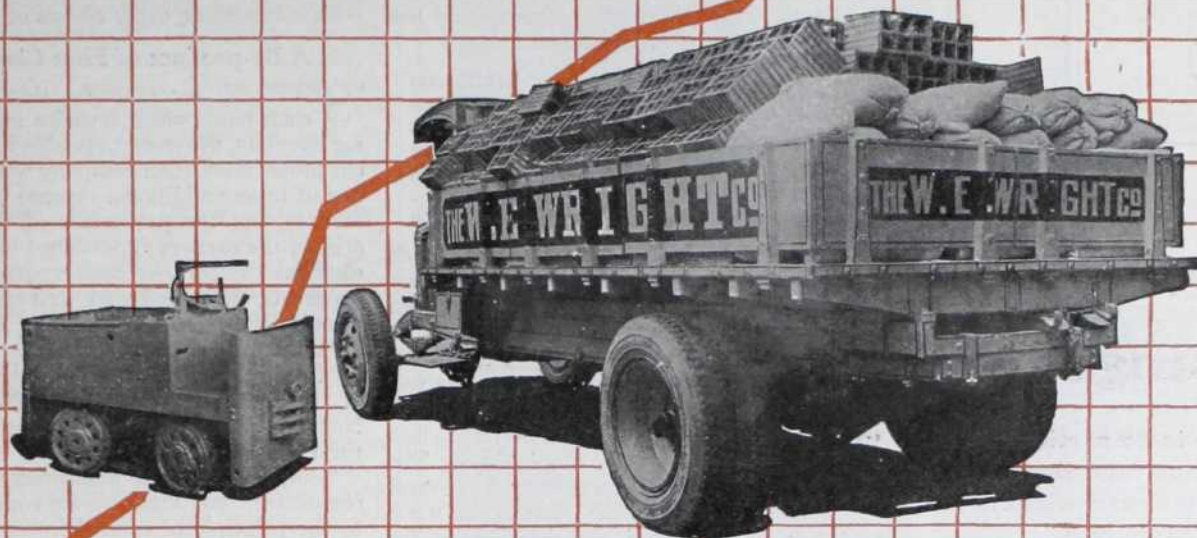
"The United States Tariff Commission has stated the general case very well. Let me quote:

"There are commodities, the joint product of processes turning out many other articles, whose actual individual cost can never be accurately determined. The financial problem of production of such articles is largely a question of trial and error. If the production of a new line seems to promise profit, its manufacture on a small scale is attempted; if general profits follow, the production is continued, although specific costs are not known."

"I trust, President Newton and gentlemen, that this description has given you a clear picture of the general problem involved in the case of joint products."

"Thank you, Mr. Baird," responded President Newton. "I am sure that you





## BOTH EARN MORE PROFITS ON GOODRICH RUBBER

Transportation has become the life of trade—the profit curve rises or falls over the desk of the man who chooses your company's tires.

The cost per mile is only the start. Do your tires save precious time for trucks and men — by their unfailing ability to *get there*? Do your fleets need the fleetness of air—the added speed which comes from pneumatic cushioning? Do they need the

brute-grip — the absolute freedom from trouble, which they get from solid rubber, shaped to the tread designs which Goodrich engineers have developed, in serving the transportation needs of leading industries?

For each need there is a correct Goodrich Tire—for Goodrich builds the right tire for every job.

THE B. F. GOODRICH RUBBER COMPANY, Est. 1870  
AKRON, O. In Canada: Canadian Goodrich Company, Kitchener, Ont

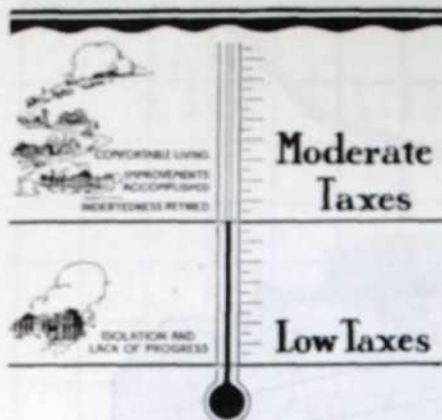
# Goodrich

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*Solids and Heavy Duty Silvertowns, High Pressure or Balloon*

When buying GOODRICH TIRES please mention Nation's Business to the dealer





## Why Buy Taxes on a Rising Market

There is no particular magic in a low tax rate. Rates are generally low because lack of progress keeps them low.

In the territory served by Carolina Power & Light Company, the dominant note has been and is progress. They have sounded the keynote in the South's industrial awakening.

But in blazing this trail of progress, the indebtedness on many improvements has already been retired. Hence newcomers to our territory are not buying taxes on a rising market.

The lure of lower taxes may be held out elsewhere, but the progress of the South is inevitable and low taxes now are irrevocably mortgaged to the future.

But taxation is a matter of actual figures. Let us go into them with you. Just write us.

### Carolina Power & Light Company

INDUSTRIAL  
BUREAU



RALEIGH  
NORTH CAROLINA



Send for  
Booklet

When writing please mention Nation's Business

have made the matter very clear, and I shall now find it much easier to show the committee one or two of the joint cost problems that we encounter in the handling of the postal services. I shall refer first to the matter of the city and village carrier service. This service cost the company \$81,000,000. It covers the compensation of the mail carriers. In the cost ascertainment this expenditure has been distributed as follows:

Paid first-class mail.....	\$43,000,000
Second-class mail.....	13,000,000
Third-class mail.....	13,000,000
Fourth-class mail.....	9,000,000
All other services.....	3,000,000
Total .....	\$81,000,000

"How have our cost accountants made this apportionment? In general, this separation has been on the basis of the proportionate time of the carrier in making deliveries of each class of mail. To show the extent to which the analysis has gone, the time of the carrier in actual delivery of mail is divided into 'walking' time and 'stop' time. The walking time was charged to the several classes of mail on the basis of the number of stops that had been made for each class. As a mathematical process it is hard to find fault with the procedure, but what of its utility?

"Now, here is where the analogy with the cottonseed crushing industry comes in, gentlemen. We have a monopoly on first-class mail—no one can take this business from us. In view of that monopoly we have engaged to give the best and speediest service possible. If the carrier has more mail than he can handle in a delivery, matter other than first class is held over. First-class mail is, in general, of more value to the recipients than any other class. Yet in our cost ascertainment we have spread the delivery cost on a strictly mathematical basis without consideration of these value factors. If it were possible to state the value factors in terms of money, which, of course, it is not, and compare those figures with the cost apportionment as we have made them, the disparity would be as marked as in the case of the cottonseed hulls.

"Now there is another angle to this same matter which brings out the joint product problem very interestingly," continued the president.

#### What Mail Carriers Do

"OUR EXPERTS who prepared the cost ascertainment report tell us that the number of possible stops govern almost exclusively the number of mail carriers, rather than the weight, volume or number of pieces of mail matter.

"In other words, this report points out to us that as we have adopted the policy of covering each city throughout the country with carrier delivery we have saddled ourselves with an expense which is largely independent of the volume of mail to be delivered. Hence, if we were to shut off all mail matter other

than first class we would still be put to the expense of \$81,000,000 that would have to be borne by the mail of the first class. Instead of a profit of \$80,000,000 for that class of mail alone, such a move would wipe out this profit entirely. In brief, the profit or loss for any class of mail as determined by our experts is dependent upon the volume of and conditions surrounding other classes of mail.

#### A By-product of First Class

"SUPPOSE, for example, that third-class mail, which includes advertising circulars, increases to double its present proportions. Our company would not be put to any additional expense for city carriers, but the proportion of the salaries of the carriers apportioned to third-class mail under our cost report would be greatly increased and that assigned to other classes of mail would be reduced by a corresponding amount.

"I wish now to turn to another phase of the subject," remarked President Newton, "the matter of the cost of the rural delivery service."

"But," interrupted a member of the committee, "you know we are committed to the principle of rural delivery and it is our policy to expand the service rather than curtail it."

"That is so," replied Newton, "but our treatment of the rural delivery expenditures in the cost ascertainment has an important bearing on the final cost of the various classes of mail matter and their relation one to the other.

"The expenditures for this service during the past year as apportioned by our experts to the several classes of mail service were as follows:

Paid first class.....	\$30,000,000
Second class.....	35,000,000
Third class.....	16,000,000
Fourth class.....	3,000,000
All other services.....	2,000,000
	\$86,000,000

"Here is an item of expenditure which is governed entirely by the mileage of the routes served. In other words, the expense is not proportioned to the volume of mail. It is an established fact that the volume of mail handled by the rural delivery service is but a very small part of what might be handled at the same cost. Mr. Thornton, who, in addition to being a member of our committee, is also the president of the North American Manufacturing Company, has had a situation in his company that is interesting to us. Will you kindly describe it, Mr. Thornton?"

"Gladly," responded Mr. Thornton. "Following the war, the thirteen factories of the company were compelled to operate at a very low rate of production. Orders were not to be had. Our accountant found that overhead on unused capacity was \$2,000,000 per year. Obviously, we could not charge to current costs the expenses of machines and entire departments that were shut down for lack of orders.

"Our engineers designed new lines. Ex-



tensive advertising of these new products was undertaken. The expenses for two years for advertising and development amounted to more than \$1,000,000 per year. We could not charge these amounts to the curtailed production during these two years. The plan we followed was to charge the overhead on idle plant, \$2,000,000, to the accumulated surplus and the charges for advertising were set up on the balance sheet as a deferred charge to be written off over a period of years. We are now nearly in full production, and the reduction of this item is proceeding rapidly."

"I don't see how that situation applies to us," interrupted a committeeman. "We have got to take care of the cost of rural delivery as it comes along."

"Exactly," assented President Newton, "but, as you see, we do have involved in this \$86,000,000 item a very considerable amount that represents only partially employed facilities. Now we must charge that to postal operations in the year in which it is incurred. But I wish to call your attention to the results of the allocation of the amount to the several classes of mail."

"You will observe that, of the total of \$86,000,000, second class has been charged with \$35,000,000, or 40 per cent of the total. As to method of allocation, the cost of rural delivery is divided between the classes of mail proportionately to the 'stops' required for each class. Where a stop is made to deliver, say, three classes of mail, each class is charged with one-third of a stop. This procedure then allocates the total expense by a mathematical process. Evidently second-class mail—that is, newspapers and magazines—forms a very much larger proportion of the total of the farmers' mail than it does in the case of the mail of the city resident. In city delivery, second-class mail takes but 16 per cent of the total cost of delivery."

#### Accounting a la Government

"AND I might say in passing that of the free-in-county second-class mail, which, as you know, consists very largely of country newspapers, a very considerable portion of it is handled by the rural delivery service."

"Now the practical effect of this attempt to separate a joint service by mathematical means is to load up the second class with a very large proportion of the 'overhead for unused facilities,' as Mr. Thornton has called it in his business. Moreover, we have in this amount a portion on account of free-in-county matter—a policy service which should not be charged against second-class mail alone. Here, again, we have a case similar to the cottonseed hull situation described by Mr. Baird."

"But, Mr. President," interrupted a director, "my understanding has been that our cost statement showed a deficit on second class mail not explained above by these charges for rural delivery and free-in-county mail which, I think



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we will all agree, represent unfair allocations. I have had a feeling all along that we ought to have further facts about second-class mail."

"That is true," replied President Newton. "The figures which we have had available have led us to do some things which were very unsound from the company's standpoint with regard to the rates on certain portions of second-class matter. As you will recollect, to meet increased costs during the war we increased rates on four of our services. Letter mail was increased from 2 to 3 cents; the postcard from 1 to 2 cents; a stamp tax was placed on parcel post; reading matter in second-class mail was increased from 1 to 1½ cents; and a sliding scale of zone rates for advertising matter was established, effective by four yearly increases, the last increase establishing a scale of from 2 to 10 cents per pound, depending upon the distance."

"You will see that we established here a distinction for the first time between reading and advertising matter in the same publication, and we felt that this would prove to be a sound procedure from the standpoint of the company, because this advertising matter has a commercial character, and we believed that it would be able to stand the increased rates. Of course, we were prevented under our franchise from treating reading matter as commercial business on account of its recognized character as a medium of public enlightenment and education."

### Express Offers Competition

"AS A MATTER of fact, the reports show a decrease in the volume of this matter handled by our company."

"Our competitors, the motor truck, the express companies and the railroads, have gotten this business, and it is unfortunate for us, because it is one of our most satisfactory items."

"This opens a large question," went on President Newton, "but now that the subject has been mentioned I ought perhaps to explain a little further so that the members of the board will have an understanding of the situation affecting this class of mail. It is not only the free-in-county which I have mentioned that contributes a loss, but it is in much greater degree the small publications or leaflets running many copies to the pound, in some cases as high as forty, fifty, or even a hundred to the pound, which we are required to carry at the pound rate regardless of cost. And here we are in many cases ringing forty, or fifty, or even as many as a hundred door bells for a compensation of 1½ cents."

"Of course, you understand that this is one of the conditions of our franchise, but the point I make is that in our cost studies and in our rate making we should differentiate between the different kinds of matter in second class. We should not pick out only the profitable portion—that is, the advertising—and fix rates on it with the idea of making up the deficit on the other portions. At least

we should not be led to make rates higher than the traffic will bear and so lose to our competitors this really profitable business."

"But, Mr. President," asked the director, "can we really afford to attract more of this matter to the mails? Would we not have to employ a large amount of additional help, and would not the cost go up proportionately?"

### More Volume, Less Overhead

"I HAVE carefully considered that aspect," replied President Newton "and am convinced that your apprehensions are unfounded. Let us consider for example, the elements that enter into the service and see what the effect would be on our expenditures if we were able through lower rates to attract a large volume of second-class mail. Obviously, we should have no increase in expenditures for postmasters. Nor would there be any considerable increase for expenditures for city, village and rural delivery, for, as I have said, these services are governed by other factors than volume of mail matter."

"There would be little, if any, increase in expenditures for such items as rent, light, heat, etc. There would be some increase for post office clerks and carriers, but it would be small. The chief increase would come in the railroad transportation, but this is only a small fraction of the apportioned cost."

"The treatment we must give the problem was set forth very aptly in the quotation by the United States Tariff Commission. Let me apply it to our own business:

"There are cases such as the postal service where there are several classes of mail—the joint product of several processes, such as collection, mail transportation and delivery—whose individual cost can never be accurately determined. The financial problem of extension of such services is largely a question of trial and error."

"Now, then, finishing the quotation as it was written to show how the problem is solved in manufacturing industry:

"If the production of a new line seems to promise profit its manufacture on a small scale is attempted; if general profits follow, the production is continued, although specific costs are not known!"

"It seems to me," broke in a member of the committee, "that we have pretty effectively demonstrated that our Cost Ascertainment Report does not furnish a sound basis for rate making or determining the gains and losses of the several classes of service. But how, President Newton, can we put our half million dollar investment in this cost study to work so that it will not be a total loss?"

"It is not a total loss," replied the President. "It contains valuable information, but, as you have said, it cannot be used solely as a rate-making guide. We must take into account rate-making principles which it does not adequately reflect."



# "You're Crazy! I'm Netting \$15,000 a Year Now!"



Ask your stationer or write today for your copy of our new catalog-manual, "Worth Keeping—Records That Talk."

told the manufacturer he was *making* \$30,000 a year on his staple lines—and *losing* \$15,000 on "Jumbo," his pride and joy! "Jumbo"—the toy with such a big margin of profit!

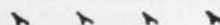
"**V**ES," agreed the accountant, "that may be true, but perhaps you are not netting all you should. Do you really *know*?"

The manufacturer of electrical appliances rather resented suggestions. Hadn't he built up a profitable business from nothing? And wasn't his electric toy "Jumbo" one of the hits of the season?

Yet the accountant's words stuck in his mind. Some months later, he decided the advice might be sound. He installed a new accounting system—by departments.

The system shattered some beautiful illusions. It

Reluctantly he discarded "Jumbo." His profit column tells a different story now!



Irving-Pitt Records That Talk expose the "Jumbos" in your business. Clear, concise and specialized, I-P Accounting Systems substitute facts for guess work. They are easy to use because they are easy to understand—nothing high brow or superfluous. Sizable concerns and small retailers alike find I-P Systems ideal for their particular requirements. See your I-P stationer or write us today for our new catalog-manual, "Worth Keeping—Records That Talk."

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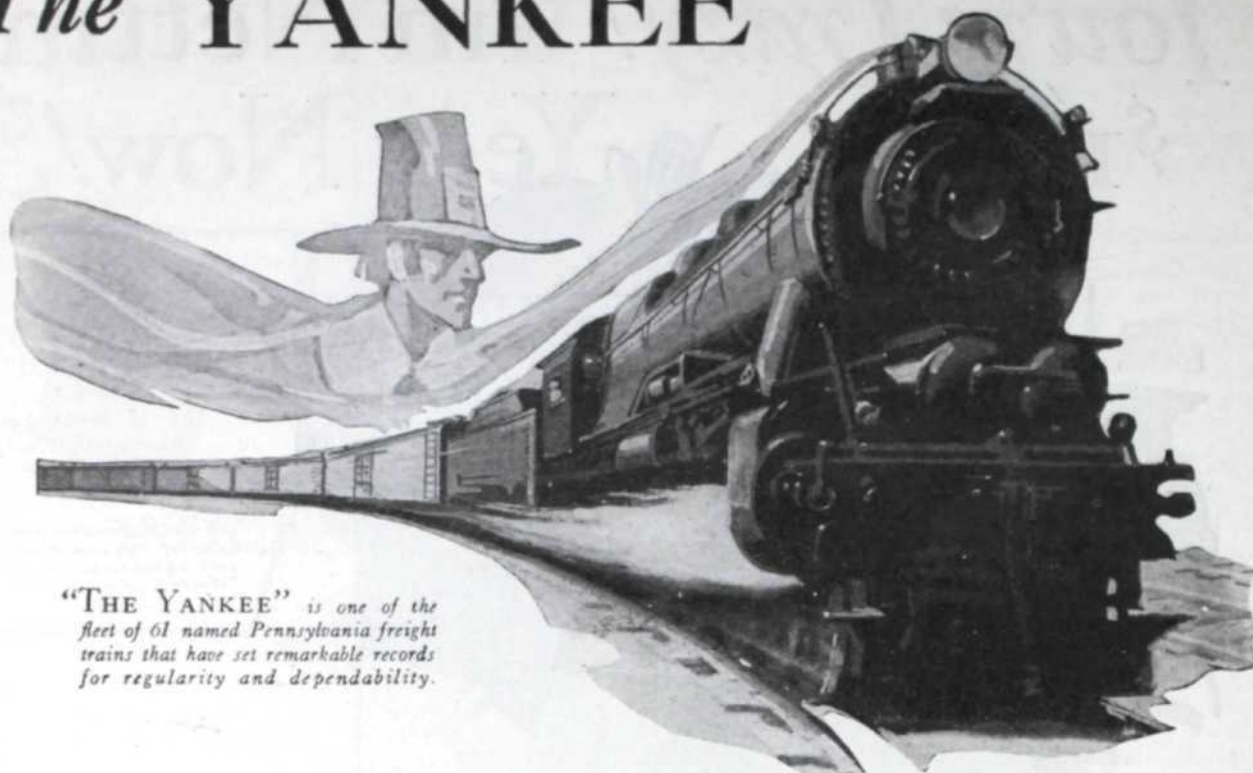
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New England industry, coupled with an unremitting Puritan conscience which could not rest until the job was completed, helped America to grow from a small colony into a vast empire. Today the products of New England still command an important place in the markets of the nation.

\* \* \*

In the matter of conscientiousness and industry "The Yankee," a big Pennsylvania freight train, is as much of a New Englander as any citizen of the well-known "Back Bay."

"The Yankee" hauls New England merchandise to Chicago and

he sets himself the job of making consistent, dependable on time arrivals. In this he has been conspicuously successful, for a long record of on schedule perform-

ances is written after his name. Every evening "The Yankee" picks up the caravans from the humming factories of New England at Greenville Yards, Jersey City.

Then he begins his run to Chicago, sticking to it with true New England tenacity until the trip is over and the merchandise set off. And all along the line this train receives careful supervision, no effort being spared to keep it always on schedule.

A thousand hands combine their efforts to bring "The Yankee" through on time. A thousand eyes guard the path down which this giant of the steel rails thunders. To this splendid cooperation of the men on the train and along the route are due the remarkable performances "The Yankee" turns in so regularly and dependably.

### Shippers:

Are you giving the man who routes your freight the time and opportunity to effect the economies, contribute to the new business strategy which in many industries is considered the most important development since Mass Production?

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# What the World of Finance Talks Of

By MERRYLE STANLEY RUKEYSER

**F**EBRUARY is the season for a flight back to reality in the realm of business.

January, on the other hand, has always been tinged with a post-holiday spirit and an attitude of prophecy. Business leadership started off the new year with forecasts of high optimism, and now at length business has knuckled down to work in an attempt to fulfill the promises.

Paradoxically enough, 1928 started with one decisive advantage over 1927. It immediately followed a period of receding trade, whereas 1927 came after a year of supra-normal activity.

After four months of an exceptionally high level of activity, 1927 witnessed a recession from a record-shattering pace to a more normal basis. The setbacks in some industries, especially the automotive and steel trades, were drastic. Toward the end of the year, general production was at the lowest ebb since December, 1924.

Accordingly, the question no longer remained, "How long can this high level of prosperity last?" but became instead, "When will the slump be over?"

This year got under way with shortages in some lines rather than glutted markets. The restraint and caution in the last half of 1927 cleared the way for genuine and solid prosperity this year. Col. Leonard P. Ayres, the soothsayer of the Cleveland Trust Company, regards the recent setback as the culmination of the Coolidge prosperity business cycle, and believes that a new cycle is in the making—that a substantial upswing in trade is imminent.

The absence of the Ford Motor Company from production for many months, the unwillingness of President Coolidge to run to succeed himself, the soft coal strike, the unseasonable weather, the floods in the Mississippi valley and in New England, are among the factors that slowed up business in the latter part of 1927.

On the other hand, many of the basic supports of the long-time prosperity are still operative—America's dominant position in the world market for monetary gold, America's efficient banking machine, improved business technique in the field of manufacture and distribution, adequate transportation facilities, a growing foreign trade, a stabilized government, and an energetic and venturesome population.

Employers are committed to the economics of high wages as a means of assuring a market for the commodities of mass production. The instalment plan, with new safeguards, is coming into increased acceptance as a mode of extending credit at home and abroad. Prof. E. R. A. Seligman's elaborate two-volume defense of instalment selling has made a profound impression and has temporarily stilled criticism of the dollar-down system. To succeed permanently, the instalment plan presupposes more or less business stability.

**O**F SOME bankers it has been remarked, "They are not particularly intelligent, but they are good bankers," astute, that is, in judging the proffered

paper of borrowers, but not gifted with general brilliance. John E. Rovensky, first vice-president, the Bank of America, New York, is both a good banker and an intelligent citizen. He lifts ordinary business discussions above the mere chatter of the marketplace.

Mr. Rovensky believes the country has been in the midst of a process of elimination of weaker productive units as a means of correcting the over-industrialized condition in which we found ourselves after the war. Mr. Rovensky is of the opinion that this weeding out of the less fit is not yet over.

"The outlook," he said, "seems to favor a continuation of the trends of the past year, namely:

"Rising wage level due to stronger labor organization, restricted immigration, higher ideals as to standards of living. The rise will naturally here and there be broken by recessions, but the general tendency seems to be upward.

"Fair manufacturing profits on the part of the leaders in each line of industry, the sum total of such profits being in many cases quite large as the result of the leaders taking business away from their less fortunate competitors.

"Elimination of weaker units until the over-industrialized condition is corrected.

"Growth of the business of public utilities with corresponding satisfactory profits.

"Prosperity on the part of railroads dependent upon the movement of railroad wages and, in time, changes in railroad tariffs.

"Spread of chain-store merchandising with increased sales far more than offsetting lower percentage of profits and resulting in greater net earnings.

"On the whole—business satisfactory in volume but at a moderate percentage of profit."

**T**HE F. W. Woolworth Company has demonstrated that Germans and Yankees are brothers under the skin. In spite of the almost universal pre-

## RAILROADERS IN THE NEWS



Leigh R. Powell, president of Seaboard at 43, said to be the youngest railroad president

**H**ERE are five rail executives who are being talked about in transportation circles. Each of the five started with his road in a relatively humble position, and each in a different department.



C. E. Johnston, slated to become the new president of the Kansas City Southern road



J. W. Graham, appointed vice-president of the Nickel Plate road, in charge of traffic



H. A. Scandrett, named president of the Chicago, Milwaukee & St. Paul Railway



Gerrit Fort resigns as vice-president of the Boston and Maine to head a travel bureau

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ditions of failure in the Teutonic press, the subsidiary of the American five and ten cent chain has achieved greater success than anticipated in the nine stores opened in Germany since last July, according to Hubert Parson, president.

Mr. Parson told me that he thinks Germany is taking to the five and ten cent (or rather twenty-five and fifty pfennig) idea better than England did. The Woolworth Company has two hundred and ninety-nine threepence and sixpence stores in the British Isles. German commentators took a pessimistic view because German concerns had tried to adapt the American merchandising innovation to German conditions—and failed. Several of the leading German department stores also moved in the direction of specializing in certain departments in very cheap merchandise, but they have gradually gotten into higher-priced goods.

That seems to be the universal trend for all except the Woolworth Company, which is the only chain that has permanently stuck to the 10 cent limit. Partly for this reason, the Woolworth Company, which in recent years increased its turnover from six to eight times a year through the elimination of duplicate items, saves a larger proportion of gross profits for net than any other chain. It now figures on a profit of 10 per cent. The optimistic Mr. Parson perceives no insuperable obstacles to dotting the maps of the rest of the world with red Woolworth stores.

**T**HE stock market in recent months paid little attention to short-term trends in business. Although industrial profits on the whole declined at least one-seventh from the 1926 levels, representative industrial stocks advanced more than 24 per cent. Likewise, though the earnings of Class I railroads dropped about 8 per cent, railroad stocks gained 12 per cent in market value. Industrial profits declined on account of heightened competition, decreased volume, and receding prices. The same underlying conditions were favorable to public utility and railroad companies, which were protected against the price decline through fixed rates for services, and which benefited from lower prices as buyers of materials.

The slump in net earnings of the railroads was in part due to a falling off in traffic, and perhaps even more due to a rise in wages during 1927.

Public utilities constituted the only broad class that set new high earning records last year. They benefited from the reduced cost of supplies, and from the extension of their activities as the country went further in the direction of complete electrification. Strangely enough, public utility securities, as compared with leading industrial stocks, were neglected. One reason for this was the factor of political risk, with the proposed investigation of the industry, in



accordance with Senator Thomas J. Walsh's resolution, in the background.

THE wider diffusion of ownership of public utility securities has been continued. Since 1914, the power and light companies alone acquired 1,430,000 shareholders who supplied more than \$1,300,000,000 in customer ownership campaigns. The political and social advantages of this popularization of ownership have been widely recognized. Technically, these campaigns have altered the attitude of directors toward the capital structures of corporations. Customers have been asked to buy junior securities—common and preferred stocks.

In ordinary corporate finance, the purpose of stock financing is to give the corporation leeway in lean years. The interest on bonds must be paid if a company is to remain out of the bankruptcy courts, but dividends on shares can be discontinued at will by the management. Without changing the law, customer ownership campaigns have changed the moral status of junior public utility securities, which have been sold to customer owners as investments, not speculations. To discontinue the dividend would quickly dissipate the good will which arose from the new partnership tie. It would be better for a company never to have sold stocks to customers than to have to omit dividends in times of stress.

It will be argued that public utility earnings are stable—without the sharp ups and downs of the income of industrial corporations. That statement is true, provided a qualifying footnote is added. Public utility earnings are stable (with a gradual upward tendency), provided the general price level does not fluctuate violently. Inflation is anathema to public utility prosperity. The war and post-war rise in general commodity price almost tore the public utility industry asunder.

THE gift of salesmanship is becoming an increasingly important qualification for a banker. It was not always so. The establishment of new-business departments by banks is a new phenomenon. When Frank A. Vanderlip became an officer of the National City Bank in 1901, he found that the bank had never before sent out letters to strangers asking them to open accounts. The bank at that time had no solicitors outside singing the praises of the bank to potential depositors and borrowers. But now the solvent business man, especially in the larger cities, is canvassed almost daily either by direct mail or by personal visit. In the case of big prospects, officers and directors supplement the calls of routine employees in the new-business department. Directors are chosen largely because of their capacity to attract accounts.

Contacts bring new business.

One of the substantial New York banks got the business of a large Pacific coast oil company as a result of a meet-

## In 1928~ greater efficiency!

MEN who specialize in forecasting business trends seem to agree that 1928 will be a good year for business. But they give warning that in practically all lines there will be need for still greater efficiency, closer economy in production.

It is time to ask, "Is all your equipment really modern? Aren't there new, improved machines it would be a real economy to purchase?" Working capital need not be impaired

### A fair example

of what can be done is furnished by a printing concern. A press earning \$90 a day was discarded because its crew was capable of greater productivity. On a later model, faster press the gross earned was \$115. With the same crew the new press made \$25 a day more for the Company. After allowing for interest and depreciation the Company had a net gain from the new press of over \$4,000 the first year! This new press, costing \$11,000, was purchased on the installment plan.



Makers and distributors of many kinds of machinery and equipment are using the deferred payment plan to widen their market by enabling their customers to put the new machine on the payroll, making it earn its way.

Founded in 1908 this organization has financed the sale of more than \$1,000,000,000 worth of selected products. Special C. I. T. Plans have been developed for many types of machinery.

*Inquiries are invited from all interested in offering their customers the opportunity to acquire new equipment upon sound installment terms.*

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Members of the New York, Boston, Chicago, Cleveland, and Detroit Stock Exchanges

ing of the executives of the two enterprises on a golf course in England.

Albert H. Wiggin, president of the Chase National Bank, is regarded as one of the leading business getters. Charles E. Mitchell, head of the National City Bank, who was once a bond salesman, exemplifies the best characteristics of the salesman. On the other hand, William C. Potter, president of the Guaranty Trust Company, an engineer by profession, who in recent years has become recognized as one of the outstanding financial minds in the country, does not regard the conquest of new accounts as one of his duties. He believes that it is his task to make sure that such business as is brought in through other channels is soundly handled.

UNDER amendments to the Federal Reserve Act, national banks are now permitted to do nearly everything that a trust company may. Accordingly, the competition among banking institutions for fiduciary accounts is greater than ever before.

IN COMPARING the size of national banks and trust companies, allowance must be made for differing accounting methods. Trust companies report deposits and official checks as separate items, which, if added together, are equivalent to the item of deposits appearing on the statement of a national bank.

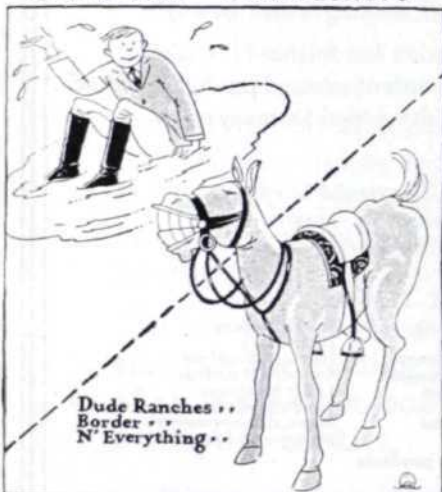
THE CAPITALIZATION of a banking institution, of course, consists of capital stock, surplus and undivided profits. Undistributed net income is transferred to undivided profits. As this item grows, large even amounts are withdrawn, and transferred to the surplus account, which is usually in round numbers. When surplus and undivided profits get unduly large in relation to the capital stock, there is usually a transfer of surplus to capital through melon cutting or the sale of new stock priced below its book value.

All three items of capitalization stand as a guarantee fund for the protection of depositors, but capital stock is on a slightly different status. The capital is subject to a double liability. The holder of each share in times of difficulty could be assessed \$100 for the rescue of the institution. The shareholders also own the surplus and undivided profits, but the latter items are not subject to a double liability.

BANK prosperity has been heightened by a tendency to make banking service universally available. The check is, to an increasing extent, becoming the medium of trade. In Germany, a bank account is still looked upon as a symbol of affluence. As an individual rises in the social scale, he has a decreasing need of currency, and makes increasing use of bank funds. The very rich man, who is transported in his own automobile, who eats at the club, who gets clothed

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NATION'S BUSINESS  
Washington, D. C.



at a custom tailoring establishment, lives almost entirely on a credit basis. He needs cash mainly for gratuities, but frequently his secretary takes care of tips. It would seem that an individual needs actual currency in inverse ratio to the amount of wealth he possesses.

At present there are probably as many bank depositors as there are families in the United States. A new financial census would show striking facts about investors and bank depositors. Unfortunately, precise data are lacking.

The latest published figures showed that there were 20,500,000 deposit accounts in national banks in 1921. In 1919 there were 2,279,877 fewer accounts. Since 1921, labor banks have had their growth, and workingmen generally have received higher real income, thus making them better prospects as bank customers.

**T**HE spectacular rise in bank shares has been paralleled by an upturn in insurance stocks. The experience of the great fire insurance companies is an argument in favor of well-managed investment trusts. The fire insurance companies, by and large, have lost money in their principal business of underwriting fire hazards, but have done handsomely for their shareholders through the by-product aspects of the business—from income on investments and profits from investments.

In theory, an investment trust takes over the profitable by-product end of the business and eschews the unprofitable underwriting activities. The difficulty with the new investment trusts is that many lack the experienced and skilled managers which the insurance companies have developed over a long period of years.

The great spurt in insurance stocks in recent months springs in part from reforms in underwriting fire risks. Through increases in rates and other adjustments, the fire companies as a whole stopped their losses from fire underwriting. It is expected that, when the reports for 1927 shall have been published, they will show that the fire insurance companies as a class at least broke even. Well-managed casualty companies, on the other hand, have usually made a profit out of accepting other people's worries and risks.

At this writing, insurance stocks are not only quoted at higher absolute prices than ever before, but they are also selling at prices higher in relation to book value and earnings than in the past. They recently rose on the average 50 per cent above the low levels of 1927. They show a gain of 100 per cent over 1925 prices, 200 per cent over 1921 levels, and 400 per cent over 1913 quotations. At these levels, the prudent investor will naturally begin to wonder whether the peak has been approached for the near term.

**A** SUSTAINING factor in all the stock markets has been the increasing tendency, especially on the part of individ-

**T**HE Equitable Trust Company of New York is a commercial bank offering every facility and convenience of the large metropolitan banking institution. It has shown a gain of more than 75% in net deposits during the last seven years.

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Organized in 1871, The Equitable Trust Company, in a half century's growth, has built up one of the most complete and far-reaching foreign banking services offered by an American trust company. This Company has three European offices, two in London and one in Paris, an office in Mexico City, and through its subsidiary, the Equitable Eastern Banking Corporation, is represented in two large central markets of the Far East, Hongkong and Shanghai. These offices and a highly developed system of more than 11,000 correspondents have gained for The Equitable an unusual prestige among foreign banks and business men.

#### The Equitable's Domestic Organization

In addition to four offices in New York City, The Equitable's domestic organization includes district representatives' offices in seven of the country's key industrial cities. Two of these in Boston and Washington are offices of its subsidiary, The Equitable Securities Company, Inc. These offices operate for the convenience of correspondent banks and local business houses carrying New York accounts. Close contact with the home office enables our representatives to offer valuable facilities for supplying international credit information, for arranging every kind of foreign banking transaction, and for executing orders in the security markets of the world.

*Business houses whose broad activities and interests require a New York banking connection are invited to communicate with our local representative or New York office regarding the advantages of an account with The Equitable.*



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A certain good bond may meet the needs of a friend down your street, but yet may miss your own needs. Present holdings, personal income, and future plans all affect logical choice. When you invest through The National City Company you have the benefits of its broad experience in meeting the needs of thousands of other investors. You also have its willingness to analyze your situation thoughtfully before making recommendations. Competent bond men at any National City office will gladly help you.

## The National City Company

*National City Bank Building, New York*

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### FORESTS CAN GROW LIKE CROPS

THIS new booklet, "Progress in Commercial Forestry," published by the Natural Resources Production Department of the U. S. Chamber of Commerce, is now available to you at 10 cents a copy.

Its 18 pages tell vividly the story of the development of 21 million acres of forest land in this country for second crops.

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U. S. Chamber of Commerce, Washington

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### TIMELY

"Nation's Business gives the business man what he badly needs, the best current thought, the best forward look on all business problems," says Ernest T. Trigg, President of John Lucas and Company, Philadelphia. "I read it more religiously than any other magazine."

uals of moderate means, to buy stocks instead of bonds for permanent investment, thus reducing the floating supply for speculation.

Unlike speculators, these buyers do not soon become transformed into sellers. This fixed attitude will, of course, entail sitting through reactions as well as advances.

IF THE country were to summon a business executive to the Presidency of the United States, Owen D. Young, outstanding business statesman, would no doubt get consideration. A lawyer by profession, he is a corporation official of the new school. As chairman of the General Electric Company and of the Radio Corporation of America, he wields a large influence.

Moreover, he was one of the major voices in the formulation of the Dawes Plan, and acted as first Agent General of Reparations. The *Birmingham Age-Herald* recently suggested Mr. Young's name for the Presidency.

Among other business men whose names have been mentioned politically are Vice-President Charles G. Dawes, a Chicago banker, and Secretary of the Treasury Mellon, a Pittsburgh financier.

ATTORNEY General Albert Ottinger, in New York, has taken the leadership in formulating legal safeguards for investors who patronize investment trusts, which he proposes should be brought under the active supervision of the State Banking Department. It is understood that substantial banking interests will oppose some of the specific recommendations on the ground that they interfere with freedom of action.

MAX SACKHEIM, member of the advertising firm of Sackheim & Scherman, looks upon human beings as potential answerers of coupon announcements.

He recently assigned a staff member to write an advertisement for a course in personal success. His assistant, who earned \$60 a week, was a cultivated man, learned in the humanities. In order to work him into a frenzy of enthusiasm, Mr. Sackheim said to him:

"Consider your own case. In spite of your intelligence, you are earning no more than Jones in the cut room, and Jones never even heard of Shakespeare. What is wrong with you?"

The ad writer became introspective and turned out an appealing advertisement, giving all the symptoms of failure.

He had directed the searchlight on himself and uncovered his faults. The powerful advertisement was autobiographical. After it was finished, the copy writer went into Mr. Sackheim's office and asked for a raise.

Sometimes customers, who on inspection of direct-by-mail books feel disappointed, write in to say that they regret that the writer of the advertisement was not the author of the book.



# Paternalism Runs Rampant

## Government Bureau Ridden

**T**HE *Atascadero News*, Atascadero, Calif., joins in the increasing chorus of protest against governmental paternalism. Its well-informed editor writes:

It was not reserved to the bright editor of *NATION'S BUSINESS* to discover that governmental paternalism runs mad in this country. Observant, thinking people have long seen and deplored it. But his warning against existing and increasing dangers is put in a nutshell and commands attention.

"Let Washington do it," he says, is the rallying cry of the "panacea-peddling politician" abroad in the land, and "two months' earnings of every man, woman and child in the United States go to the tax-gatherer."

"The rabid Socialist of ten years ago must smile behind his hand as he views the spectacle: government operating ships and white-washing hen houses; running vast power projects and prescribing castor oil for babies."

All this constitutes an assault upon the one great thing which has made America what it is today—"individual reward for individual merit"—and he declares that a peaceful revolution of protest is in progress.

### Time to Call a Halt

**C**ERTAINLY it is high time to call a halt. Nevertheless, Congress soon will be called upon to vote millions to prolong the spectacle here depicted.

Paternalism is not exacted for Uncle Sam alone. States and municipalities emulate his folly in doing all manner of things that would have appalled thinking mankind in the more prudent past. Not until the brake is applied and economic wisdom exercised will the country, regardless of present prosperity, be on a sound and secure basis.

Coincidental comes word from Washington that another current evil—bureaucracy—is fully recognized in highest quarter. Calvin Collidge flatly refused to consider the creation of more bureaus. He appreciates, no doubt, that there are now too many and that efficient administration is hampered and handicapped on their account. Indeed, the Government is today so bureau-ridden that it functions with difficulty.

Paternalism breeds bureaucracy. These twin evils go hand in hand. Check the one and you cripple the other. Dependence upon government is expensive and weakening. Administrations through bureaus, constantly expanding and assuming power, is demoralizing and un-American. Combined, they are a real menace to the Republic.

Issues for 1928 are now formulating. Doubtless it is too much to expect that in a campaign, proverbially hinging upon candidates rather than principles, these two manifest governmental evils of the times will become paramount. But reform should be the watchword and will be, if the electorate stops to think.

HERE  
MR. SECRETARY  
IS THE  
ANSWER  
OF ONE  
INDUSTRY



### MEETING THE STANDARDS OF AN AUTHORITY

The business world has come to look upon the report of Secretary Hoover's Committee on the Elimination of Waste in Industry as an epochal document.

Were Western Electric to put into words its own economic creed it would be but following out the principles stressed in that great contribution to industrial progress.

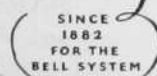
This company, as makers of the nation's telephone equipment, has long made it a practice to plan its manufacturing so as to reduce production periods to a minimum, to level off the ups and downs of factory operation, to standardize its purchasing through simplification, to inspect and re-inspect materials, methods and equipment, and to distribute at minimum cost.

In these and other ways, Western Electric has sought to measure up to its three-fold responsibility as purchasers, manufacturers, and distributors for the Bell System.

(No. 1 of a series inspired by the report of Secretary Hoover's Committee On Elimination of Waste.)

# Western Electric

Purchasers. Manufacturers. Distributors





# This is the most economical way to join sheet metal

**PARKER-KALON** Hardened Self-Tapping **SHEET METAL SCREWS** have displaced machine screws, stove bolts or rivets in more than 35,000 sheet metal shops and plants where sheet metal products are produced because they are easier, quicker and cheaper to use.

Their economy is really amazing. In most cases they reduce assembly costs from 50% to 75% because they cut their own thread in the metal as they are screwed in, thus eliminating taps and tapping operations. In addition, they make better fastenings—fastenings that withstand vibration.

Hardened Self-Tapping Sheet Metal Screws are used extensively by makers of automobiles and automobile accessories, railway cars, ships, aeroplanes, metal buildings, metal furniture, metal refrigerators, stoves and furnaces, metal windows, doors and partitions, cornices, skylights and scores of other things made entirely or partly of sheet metal. In many plants these Screws save thousands of dollars a year.

## **PARKER-KALON** HARDENED SELF-TAPPING Sheet Metal Screws

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1 Punch or drill a hole as in Fig. 1; or pierce a hole as in Fig. 2.

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# LISTENING IN ON CONGRESS

Our observer rescues from oblivion some flights  
of wit and fancy overlooked by the more serious-minded press

**D**URING the first week of the Seventieth Congress, the House was entertained by Representative Gallivan, of Massachusetts, who undertook to "philosophize a bit on various matters 'touching on and appertaining to' cabbages and kings, to ambassadors and Americanism, to legations and lickspittles, to snobs and secretaries, and to that mess of pottage of bunk and betrayal, treachery and toadyism, falsehood and flapdoodle, insincerity and insolence, embraced under the comprehensive name of American diplomacy, for which we pay so liberally."

## Wherein Is Discourse of Shirt-tail Diplomacy

"IN OLDER and more robust days, America gave the world what was called 'shirt-sleeve diplomacy,' rough, resolute, and productive of results. Today we have 'shirt-tail diplomacy,' suave, servile, socially serviceable abroad, nationally noxious at home, that crooks the pregnant hinges of the knee in alien courts and capitals and shows the abash American the door. "The old-style dollar diplomat, who sported spinach and used tobacco as a diet, is in the museum; the 1927 ambassador goes in for cigarettes, safety razors, safety first and social eminence, and is visible to the naked eye only of those wandering Americans bearing mandates from Republican magnates. For all others—the air, the landscape, the department of the exterior.

"Recently the mayor of the greatest city in America visited Europe and was honorably received on his tour everywhere by all except the diplomatic representatives of his own country. Our ambassador to France, at home in Ohio and sick, was represented in Paris by the charge d'affaires, who put detectives on his trail. My old college friend, the ambassador to the Court of St. James, fled to the Highlands of Scotland to avoid meeting the distinguished tourist. Valiant enough to face a Scotch stag, his courage failed him at the thought of a Tammany tiger; but the visitor was met at the legation by an underling with an English accent so blamed English and so unlike anything American that he congratulated the legation secretary upon his Anglicization, much to that comic official's embarrassment."

REPRESENTATIVE WOOD (Ind.) reported the next day that the Paris "prefect of police stated that the distinguished

American in question was followed by two plain-clothes men from the time of his arrival in Paris. This is what is usually done by the police in the case of distinguished visitors.

## Of Greatness and of Lord Mayors

"I regret exceedingly that any man occupying the high position that is occupied by Mayor Walker should think, or that any of his friends should feel, that he has been discriminated against."

MR. GALLIVAN. Will the gentleman point out in my speech where I used one single word indicating the name of Mayor Walker?

MR. WOOD. I do not think the gentleman from Massachusetts means to try to mislead the members of this committee with reference to the position that he now occupies. His language is that "recently the mayor of the greatest city in America" . . .

MR. GALLIVAN. Some people thought I referred to the mayor of Chicago.

MR. WOOD. No; there is no one who had any such idea. There is no one who even thought that the gentleman referred to the great city of Boston. There is no mistake about the identity of the mayor, and the gentleman will not deny that or cannot deny that in truth.

MR. GALLIVAN. I do not know just what amendment my eminent friend from Indiana offered, but I am opposed to it anyway.

I made no attack on the State Department, and when I referred to "the mayor of the greatest city of America," several members of the Illinois delegation, thinking I was referring to the city of Chicago, asked me, "What happened to Bill Thompson over there?" I said, "You had better ask my friend, Martin Madden; I do not know." I have no apologies to offer for what I said yesterday and I do not take back one single word of that speech.

## Treats of Who Shall Pay the Reckoning

WHEN delegations descended upon the Ways and Means Committee at its November sessions, to complain of how annoying certain taxes were, counter questions began to arise in the Committee:

MR. RAINEY (Ill.). How many delegates are here promoting this proposition for which you stand?

MR. BLODGETT. You have asked me

another question that I cannot answer. They came in this morning and last night and I have not the complete record.

MR. RAINEY. Last night's papers reported 155. Is there more than that number here?

MR. BLODGETT. I think so. I know that two came this morning, anyway.

MR. RAINEY. Did you attend the luncheon at the Raleigh Hotel yesterday?

MR. BLODGETT. Yes, sir.

MR. RAINEY. Who paid for that luncheon?

MR. BLODGETT. I do not know, but I hope this organization did so.

MR. RAINEY. Did you take that ride in a White Parlor bus to the White House?

MR. BLODGETT. No, sir; I took no ride.

MR. RAINEY. The rest of them did, did they not?

MR. BLODGETT. I do not know.

MR. RAINEY. Do you know who paid for those buses?

MR. BLODGETT. I do not know.

MR. RAINEY. Did you attend a dinner last night at the Raleigh Hotel?

MR. BLODGETT. Yes, sir.

MR. RAINEY. Who paid for it?

MR. BLODGETT. I do not know. I did not pay for it myself. I hope our organization paid for it.

MR. RAINEY. Did you come down to the Capitol in a parlor bus?

MR. BLODGETT. I did.

MR. RAINEY. How many came down in the bus?

MR. BLODGETT. They made a bus load; I do not know.

MR. RAINEY. Who paid for the bus?

MR. BLODGETT. I do not know.

MR. RAINEY. Are you going to attend the luncheon at noon in the Senate dining room?

MR. BLODGETT. I had not had notice of it.

MR. RAINEY. I will give you notice of it now.

MR. BLODGETT. I thank you, and I will accept the invitation.

MR. RAINEY. It is not at my expense, however.

MR. BLODGETT. That is different. I will buy yours.

MR. RAINEY. I do not object to buying yours, but I do not want to buy lunches for all the others.

MR. BLODGETT. I do not either.

MR. RAINEY. Who will pay for it?

MR. BLODGETT. I have no knowledge on that.

Later Mr. Blodgett introduced to the



# Two days



## — or two weeks — two men or four men

What takes two or three weeks with plaster walls, can be finished in two days with Circle A Partitions.

"Handy men" erect Circle A Partitions—no skilled help is required. These attractive office walls fit together simply and strongly. There are but seven parts to each seven-foot unit. The top unit—to make a ceiling-height partition—slides securely into the seven-foot unit, making one solid section from ceiling to floor.

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Committee Mr. Baird, a member of the Iowa State Senate.

MR. BAIRD. We come here with a resolution from the Senate of the State of Iowa in which they ask that this inheritance-tax proposition be repealed.

MR. GARNER (Texas). What about the house of representatives of Iowa?

MR. BAIRD. Yes, sir; I thought you were going to ask that.

MR. GARNER. I always like to come up to expectations.

MR. BAIRD. Yes, sir; you bet you do. You come up to my expectations, and you did two years ago.

I am going to tell you about that right now.

The house of representatives of the great State of Iowa did exactly the opposite of what we did. Now, do not misunderstand me, and I do not wish to be considered impertinent, but in our State of Iowa—and I do not know but what the the argument is good here, too—we consider that the senate possesses the brains of the legislature rather than the house.

MR. GARNER. If the same argument is to hold good with the Congress of the United States I should say it would be of little use to talk to this body.

MR. BAIRD. It seems almost useless for anybody from my standpoint to have conversed with you on this question. From the character of the argument that was put forth this morning, and the character of the questions that were asked the principal speaker, it seems to me that all you wanted to do to him was to "raze" him, and you succeeded in doing it.

MR. GARNER. What was the vote in the lower house, if you recall?

MR. BAIRD. I do not recall it; but in the upper house I can tell you what it was. It was one majority, and that was given by our lieutenant-governor.

MR. GARNER. That was a very close vote. In the house was it not 92 to 8?

MR. BAIRD. Yes; I think it was something like that; and I see your memory is very good on that point. Let me tell you how that came about.

After the resolution had passed, gentlemen from this body wrote personal letters and sent telegrams to the House of Representatives of the great State of Iowa and influenced them to cast their vote that way. It shows what influence you fellows here have over us fellows out there.

MR. CROWTHER (N. Y.). That is, even if we are not as smart as the Senators?

MR. BAIRD. Well, you progress that way. Let me tell you about that resolution.

We have a person in the House of Representatives in Iowa by the name of Rice, and he had a brother by the name of Rice also. In his home town they called one "Puffed Rice," and the other one "Cracked Rice" and it was "Cracked Rice" that was in the House. That is a fact.

MR. CHINDBLOM (Ill.). Mr. Chair-



Women's Hotel, Philadelphia, Pa.—All Common Brick

## The Utility of COMMON BRICK in all kinds of construction is well known.

The virtues of brick masonry—strength, fire-resistance, weather-resistance, permanence—are not open to question.

Superlative adjectives are unnecessary when hundreds of years of satisfactory use furnish the proof.

We simply remind you that brick buildings are also of great beauty—and not expensive.

Consult our engineering service for help on any industrial construction problem—no obligation.

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Boston, Mass.	11 Beacon Street
Chicago	605 Builders Bldg.
Cleveland—Ohio Association	
	2124 Guarantee Title Building
Denver	1735 Stout St.
Detroit	400 U. S. Mortgage Trust Bldg.
Hartford, Conn.	226 Pearl St.
New York City	1716 Grand Cen. Terminal
Norfolk, Va.	112 West Plume St.
Philadelphia	121 North Broad St.
Pittsburgh	702 First National Bank Bldg.
Raleigh, N. C.	508 Com'l Nat'l Bank Bldg.
Salt Lake City	301 Atlas Bldg.
Seattle, Wash.	913 Arctic Bldg.

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# BRICK

Forever

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man, may I ask if "Puffed Rice" was in the Senate?

MR. BAIRD. No; they had just popcorn in the Senate.

Let me read you the resolution. I think it is a marvel. Now ask me who drew it and I will tell you that, too. Then ask me who paid our way here, and who fed us, who took us to dinner today, and I will tell you that, too.

MR. GARNER. We sometimes have witnesses who occupy considerable time and do not say much.

MR. BAIRD. Yes; I suppose you do. But we are here for the purpose of telling you things. Now, let me tell you something.

MR. GARNER. We would like to hear it.

MR. BAIRD. Just wait and I can tell you something, then. But I was waiting for that fellow over there (Mr. Rainey) to ask me where I got my dinner.

MR. RAINEY. Who paid your expenses here?

MR. BAIRD. I will start first by telling you where I got my dinner. I ate dinner today with the Assistant Secretary of War, Hanford MacNider.

As to who paid my expenses here, I will tell you that, too. The very same people paid my expenses who pay the salary of every one of you—the people of the State of Iowa. That is why we are here. We are American citizens. You people here are our servants and we are your peers in every sense of the word.

THE CHAIRMAN. There is no doubt about that.

MR. BAIRD. Of course. There is no question about that; none whatever.

### Of Food and the Clothes that Go Therewith

MR. HUDSPETH (Tex.). The distinguished gentleman from Illinois (Mr. Chindblom) stated here that he represented a great city, the city of Chicago; that he represented a great business district in that windy city. I have read the gentleman's rather effusive and comprehensive biography in the Congressional Directory, and he represents ward 41, and several other wards of plutocratic coloring. I have been in the gentleman's district, and I have heard it called the aristocratic and "silk-stocking" district of Chicago; but doubtless there are many people of moderate means in that district. Whether its representative knows they are there, I do not know. I know that once when I took a train of cattle there and I attempted to eat in one of the restaurants somewhere close to Devon Street in his district, without a coat on, the restaurant proprietor said I would have to put on a coat. Well, I did not possess that article of masculine wearing apparel, so I went back to my caboose and got my "slicker" or raincoat, entered, but was told I must have either a tuxedo or evening dress, so I went to a less aristocratic portion of the city and got my victuals.

Now I observe from this same biographical sketch that the gentleman is a



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Casting weighs . . . 24.0 pounds  
Pressed part weighs 9.5 pounds  
Saving . . . 14.5 pounds



**Center Ring**  
Casting weighs . . . 45 pounds  
Pressed part weighs 15 pounds  
Saving . . . 30 pounds

**Base**  
Casting weighs . . . 37.5 pounds  
Pressed part weighs 18.0 pounds  
Saving . . . 19.5 pounds



## 4 pounds of Material now do the work of 10

A PUMP MANUFACTURER used three heavy castings—top, center ring and base. The total weight of these castings was 106.5 pounds. Our Engineers redesigned the castings into pressed steel—and reduced the weight 64 pounds—a saving of 60%. Four pounds of material now do the work of ten—and the finished pump has greater strength, with improved appearance

### No Machining—No Drilling—No Grinding

Furthermore, the three cast parts had to be drilled with more than twenty holes—each pressed part was delivered ready for assembly at once—and each pressed part fits perfectly—no additional grinding. No wonder costs were cut all along the line.

### Pressed Steel Engineering Service

It is difficult for you to judge whether pressed steel can make a saving for you. But we do want the opportunity of consulting with you and helping you determine how pressed steel will cut your costs. A free consultation with one of our engineers may save you thousands of dollars, as it has for many of our other customers.

THE YOUNGSTOWN PRESSED STEEL CO., Warren, Ohio

"Pioneers in Pressed Steel Redevelopment"

Philadelphia, 1314 Franklin Trust Bldg. Chicago, 500 Wrigley Bldg.



**How Others Have Cut Costs**—This book, "Adventures in Redesign," tells how many others have cut costs with YPS Pressed Steel parts. Send the coupon for a copy and read these actual cases. They will show you how pressed steel can meet your needs



The Youngstown Pressed Steel Co., Warren, Ohio

Please send me a free copy of "Adventures in Redesign."

Name .....

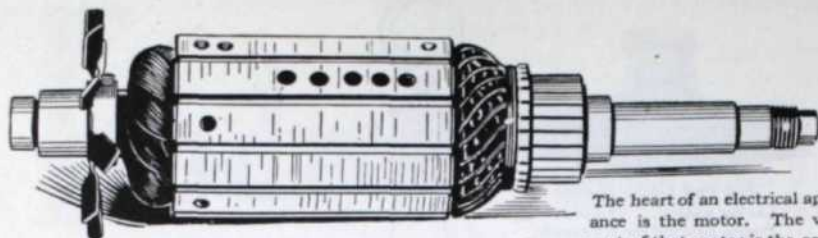
Company .....

Street .....

Town ..... State ..... N.B. 2-28

When writing to THE YOUNGSTOWN PRESSED STEEL CO. please mention Nation's Business





The heart of an electrical appliance is the motor. The vital part of that motor is the armature, its performance depending on how skillfully and well it is made.

## When You Buy Motors

**I**f you make a point by point comparison when you buy motors, you will quickly realize the vast difference between the Dumore and any other universal motor. This difference lies chiefly in the dynamically balanced armature of the Dumore, the heart of the motor.



Precision in manufacture contributes much to the perfect balance of Dumore Motors. The armature lamination above is taken from the center of the field laminations below.



The opening in the center of the field laminations is .016 larger than the armature used with it. Such minute clearances are possible only through great precision. Insulation, commutator, every part and every operation in the construction of Dumore motors must meet equally exacting standards.

This outstanding feature of Dumore motors is secured by balancing the armature while running, in a special machine of our own design. Dynamic balance eliminates vibration, with its harmful effects, by removing the cause. Our special balancing machine is so sensitive a specially trained operator is required but it is the only equipment ever devised that will detect and remove *all* unbalanced weight.

To back the quality and perfect balance of the Dumore armature, only the best material is used throughout the motor. Careful inspection of every part and operation, protects the eventual user and our own reputation as motor builders.

With increased capacity to accommodate expanding sales, we still have facilities to supply motors to a few more manufacturers. If you want vibrationless performance at no increase in price, consult with our engineering department on motors of the size you use.

**WISCONSIN ELECTRIC COMPANY**  
89 SIXTEENTH STREET RACINE, WISCONSIN

When writing to WISCONSIN ELECTRIC COMPANY please mention Nation's Business

thorough college graduate and he should know the cost of educating children. Oh, there is no question but that the gentleman is educated. He admits it—attended public schools in Chicago—graduated from Augustana College in 1890 with A.B. degree and got his LL.B. degree from Kent College of Law University, Chicago. Oh, he is educated all right, and he truly represents the farmers and cattle raisers on Devon Street, where they would not let me eat without a regulation dress coat. Also the gentleman went to school in the Sunflower State of Kansas. He attended Bethany College at Lindsborg, Kans. I believe the gentleman taught school there or somewhere else. He also says he practiced at law among those farmers and livestock producers on Devon Street, and I ask him now how can you properly educate a family of, say, two children today on an income of \$3,500? He says he is proud of the fact that he was opposed to the exemption of heads of families up to \$3,500—this distinguished scholar and graduate of all these colleges, who has a string of A.B.'s and LL.D.'s and every other kind of B's after his name as long as a cowboy's lariat.

### Wherein Is Talk of English and Imposts

MR. TREADWAY (Mass.). When a gentleman like Mr. Gregg comes before the Ways and Means Committee, for the time being his explanation goes, and we can understand him, but the moment he gets out of the room I defy even the brilliant chairman of this committee to carry with him the explanation that such a man as Mr. Gregg has made to us. We simply cannot comprehend him, and, further than that, even if he or men like him did draw up this complicated language the matter itself is so complicated and intricate that we cannot write it into plain primer English.

MR. BLANTON (Texas). And the result is that every business man in the gentleman's district in Massachusetts and every one in my district in Texas must hire a high-class expert tax lawyer, who charges big fees, to make his tax returns for him.

MR. TREADWAY. I have said hundreds of times that the law ought to be such that the average man need not employ high-priced counsel in order that he may be honest with the Federal Government.

MR. GREEN (Iowa). I was just about to say to the gentleman from Texas that a Government expert is provided for those who want to have an expert to make out their taxes for them.

MR. BLANTON. Of course, we have our expert down here in the Sergeant at Arms' office to fix our reports for us, and he is easily accessible, but take a ranchman out in John Garner's district—

MR. TREADWAY. Oh, he can go to John. He would explain it to him.

MR. BLANTON. Or in Claude Hudspeth's district, for instance, where there





The Stevens is the largest hotel in the world

### *Disturbing Noises controlled by J-M Asbestos*

The clash of pots, the clatter of dishes will never disturb the guests of the Stevens Hotel. Johns-Manville Acoustical treatment has been used in the kitchens and dishwashing rooms. This control of sound is another of Johns-Manville's ingenious uses of ASBESTOS. By this method echoes and unpleasant resonance are eliminated from auditoriums of every variety, from radio broadcasting studios or business offices. Noisy work may be made less noisy and the sounds restricted. Hospital corridors and operating rooms lose their echoing hollowness, yet remain sanitary under Johns-Manville Acoustical treatment. The cost is insignificant.

## *56 Miles of Johns-Manville pipe insulation in the Stevens Hotel*

The Stevens Hotel in Chicago faces the cold blasts that sweep over Lake Michigan. Yet every room in the Stevens, the world's largest hotel, is warm. There are 31 miles of steam pipes leading to the radiators in the Stevens. On these pipes are 31 miles of Johns-Manville Improved Asbestocel. Without such insulation it would be virtually impossible to heat so great a building, and the cost of attempting it would be enormous.

There are 25 miles of other Johns-Manville pipe insulations in the building. The various hot and cold insulations in the Stevens insure its operation at the lowest cost, yet guar-

antee the comfort of its guests.

The economies obtained by the use of Johns-Manville Asbestocel in many great buildings are equally important to every family. Never buy or rent a house without first making certain that its heater pipes are insulated with Johns-Manville Asbestocel. Without it an important percentage of your coal is wasted.

#### *Johns-Manville—Master of Asbestos*

To control power, to conserve heat or cold is the function of many Johns-Manville products. From the refractory cements which withstand the terrific temperatures of electric fur-

naces to the simple table pad for the morning coffee pot, Johns-Manville Asbestos insulations cover the whole range of heat control. For every purpose there is the proper insulation developed by years of experience, tested by uses under every condition.

In machinery and motor cars, Johns-Manville controls power through friction blocks and asbestos brake lining.

Thus the sure protection given by the 56 miles of insulation in the Stevens Hotel is but a sample of the scores of uses through which Johns-Manville Asbestos products serve industry, railroads, and homes — serve in fact the whole nation.

# Johns-Manville

## ASBESTOS MINERS AND MANUFACTURERS

**A Unique Patented Packing.** Johns-Manville Sea Ring Packing is unique. No other packing is or can be like it. Any good packing will control steam, air, water, brine and the like for a few months. Johns-Manville Sea Ring Packing lasts for years. Besides this it reduces friction to an amount that causes power savings of from 20 to 25 percent throughout its life.

**Asbestos Built-Up Roofs.** Johns-Manville Asbestos Built-up Roofs are the result of years of study. Famous hotels, theatres and factories use this long-lasting fireproof roofing. It has stood years of use without repair in all parts of the country. Johns-Manville Built-up Asbestos Roofs are given Class A rating by the Underwriters and secure lowest insurance rates.

FILL IN, TEAR OUT, MAIL

JOHNS-MANVILLE CORP., Dept. 1-43  
New York Chicago Cleveland San Francisco  
For Canada: Johns-Manville Co., Ltd., Toronto  
(Mail coupon to branch nearest you)

Please send me information about the economies of your products in my business which is

Name .....

Address .....

City ..... State .....



## Beauty contests are not confined to Bathing Girls



**P**EOPLE take Performance and Quality very much for granted. They look over the magazines and catalogs, or the dealer's stock and decide to buy what most appeals to their sense of *Beauty*. So put the utmost *Beauty* into your advertising. Make the finest possible impression upon the people whose judgment you seek to win.

The whole foundation of attractive advertising is paper *specially surfaced* to show fine artwork, cuts and typography to full advantage. Always specify such a surface ("coated") paper—of known high standards—for your leaflets, booklets, catalogs, broadsides, house organs. Even in selecting magazines for your advertising, consider the quality of paper; publications that use Coated Papers do better printing. Cantine's Coated Papers in particular reflect the quality that comes from nearly forty years of concentration on an art that calls for specialization.

Write for the Cantine Sample Book and nearest distributor's address. Also particulars of the Cantine Awards for outstanding merit in advertising and Printing. Dept. 465.

### THE MARTIN CANTINE COMPANY

SAUGERTIES, NEW YORK [New York Office, 501 Fifth Avenue]

# Cantine's

## COATED PAPERS

CANFOLD

ASHOKAN

ESOPUS

VELVETONE

LITHO C.I.S.

## 109,700 Reprints

of a Nation's Business article were recently furnished seventy-seven different concerns at their request for distribution by them.

These reprints—*The Answer to New Competition* by O. H. Cheney—were supplied at cost.

Any article in this number of Nation's Business will be reprinted for you at your request—in convenient form for distribution.

NATION'S BUSINESS, Washington, D.C.

are counties perhaps 200 miles across.

Mr. GREEN (Iowa). I might suggest in that connection, Mr. Chairman, that the farmers out in my district do not have much income tax to pay. It is evidently different down in Texas.

### Moods in the House

Mr. BLANTON (Tex.). I came to Congress 11 years ago prejudiced against Hon. Champ Clark, of Missouri, that great statesman, and then I learned to love him. One day he said to me, "Blanton, this House is just as full of moods as a dog is full of fleas, and when the House gets in a mood nothing on earth will change it; you might as well let it alone." And that is as true as anything. Our colleagues get in a certain attitude sometimes, and this House is as liable to do a wrong as is an individual when he does not understand the situation; but in the end it will do justice.

Mr. HUDSPETH. It is rumored around in the great Democratic district that I represent, that the gentleman from Texas (Mr. Blanton) is figuring on leaving this House. Does he love it so well that he can leave it and go somewhere else?

Mr. BLANTON. I shall let the Speaker of this House answer, when he said on Monday that he would rather be Speaker of this House of Representatives than hold any other office within the gift of the people. Is that an answer?

Mr. HUDSPETH. I do not think so, because it is rumored that this gentleman wants to leave this body and go somewhere else in this Capitol and represent a great party and a great state.

Mr. BLANTON. I am not a candidate for any office right now but am busy here about the public business.

Mr. HUDSPETH. The gentleman may be persuaded?

Mr. BLANTON. I shall not refuse an office if elected. Mr. Chairman, in conclusion, let me further answer the gentleman in this way. I heard that there will be no maple sugar in Vermont next season. Do you know why? "Because the poor sap does not choose to run."

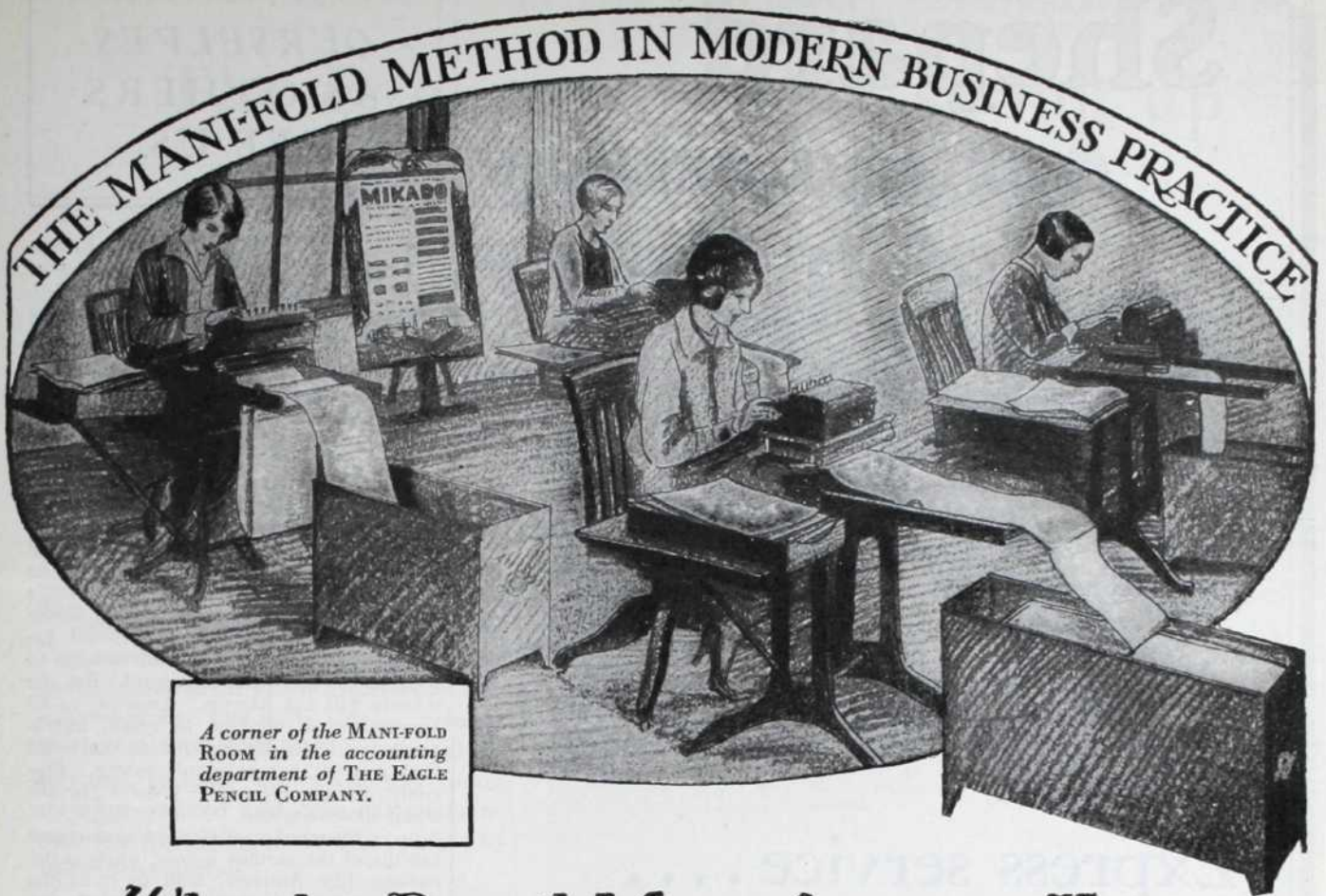
## Thank You, Monsieur Gayet!

**I**N SUPPORT of an article ("The Balance Is with France") in the November issue of this magazine, the payments to be made by France under the Berenger-Mellon agreement were listed.

M. R. Lacour Gayet, Financial Attaché to the French Embassy, calls attention to the fact that this tabulation showed principal payments only and did not consider interest payments.

M. Gayet is quite right. But our use of the figures was right, too. At least it was not intended to mislead, for the article referred specifically to "principal amount." The aggregate principal amount, as pointed out in the article, is \$4,025,000,000. With the interest added, M. Gayet points out, the amount is \$6,847,674,104.17. Even then the balance is with France.





## Why this Pencil Manufacturer Uses **MANI-FOLD**

**T**HE EAGLE PENCIL COMPANY of New York uses the Mani-Fold method for writing the one original and eight duplicate forms as a part of their accounting system. They use Mani-Fold for three reasons—speed, accuracy, and economy; and since the installation two years ago they have been pleased with the results.

The four operators in the picture take care of all the record writing that is done, and they can handle it quickly, efficiently, accurately because they each write nine DIFFERENT records at one time without a second lost. Each operator is able to devote her whole attention to the work at hand and as a result

there is greater production, less waste of time and carbon paper, and fewer errors.

Business organizations large or small have one thing in common: the burden of increasing operating expenses. They both, large and small alike, welcome an idea or method that will reduce the expense without causing unlooked for difficulties. The Mani-Fold Method has proved an economy to the Eagle Pencil Company; it has proved in numerous cases that it can reduce the cost of record writing from 25 to 33%. Actual Samples of Mani-Fold forms now being used by business firms, large and small, will be sent free for the asking. You'll be interested.

### THE MANI-FOLD COMPANY

*Division of the United Autographic Register Company*

13332 Coit Road

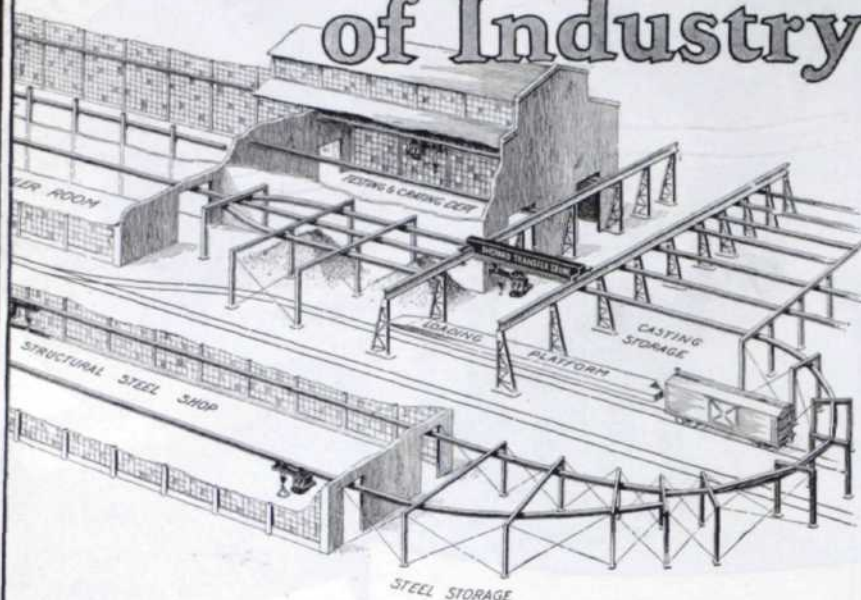
Cleveland, Ohio

*Pin the bottom of this ad to your letterhead*





# Shepard Aerial Railway of Industry



## Express service . . . . to any point, for any load

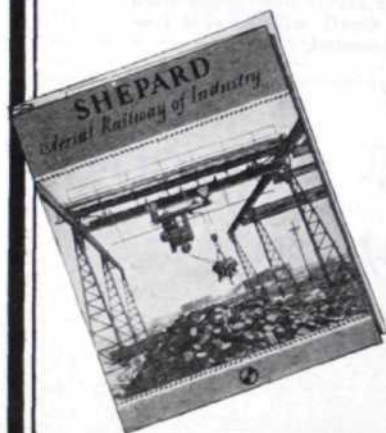
Indoors or out, to any point in the plant, carrying loads of every description, the Aerial Railway gives "through without change" express service. It covers any part of the plant or yard, working with safety, speed and precision . . . resulting in truly low cost load-moving, and increased production.

The layout shown above gives you a fair idea of the wide scope of this system—how it makes accessible remote points within yard and buildings.

The Shepard Aerial Railway of Industry consists of one or more Shepard Cage Operated Electric Hoists running on Shepard Transfer Cranes, and suitable monorail track and switches.

The Shepard Aerial Railway of Industry Catalog tells a complete and interesting story about the system. It contains plenty of illustrations, showing applications in diversified industries. Write for a copy.

SHEPARD ELECTRIC CRANE & HOIST CO.,  
354 Schuyler Ave., Montour Falls, N. Y.  
Branches in Principal Cities



# SHEPARD

ELECTRIC CRANES & HOISTS



## OURSELVES AS OTHERS SEE US

### A State of Mind Cannot Be Repealed

over disarmament helps to explain the American state of mind to the *Liverpool Post*, which finds that:

If, by some miracle, the mental attitude of Americans in the mass to free trade could be immediately changed, they would perceive that a practice which is universal between the forty-eight states of the Union, and which presents American trade with an enormous market, easy of access at every point, could probably be extended with incalculable advantage to America, to the world in general. But the miracle will not happen. America, to all appearance, is content to retain indefinitely her tariff dispensation in the belief that it gives her economic safety. Precisely similar reasoning widely prevails about disarmament.

. . . . No number of Geneva conferences can dispel the tariffist heresy, while entire nations, like America, hold to it as the sheet anchor of their industrial hopes. Nor, perhaps, can the wide creation of free trade sympathies be relied upon solely to effect a regeneration in economic practice. History would suggest, indeed, that far-reaching changes in policy are finally occasioned by the pressure of events, though, clearly, when opinion has been ripening in the direction of these changes before their actual occurrence, events move in keeping with the prevailing opinion. The American farmers, for instance, if insensibly to themselves, are now probably convinced freer traders because of their experience of a tariff which takes no account whatever of their circumstances. They are converts of events.

### Is Europe to Set Cartels to Trust Busting?

NO REASON is advanced by an article in the *Irish Times* of Dublin to give any belief that a subsidized American fleet would fare any better than the fleet accumulated under the direction of the Shipping Board. In this view the American position is defined with saying that:

American prosperity has increased at such a rate that it has become top heavy. Men like Mr. Hurley realize that the foreign markets must be developed quickly if an industrial "slump" is to be avoided, and Europe soon may expect a big "offensive" in this direction. The prospect of a new fleet of American merchant ships need not frighten British traders unduly. . . .

The British merchant service has a tradition which cannot be provided by government subventions, and, while money can provide the most modern and fastest



—[LITTLE DRAMAS IN THE LIFE OF A GREAT NEWSPAPER SYSTEM]—

## The Eggnog . . . . that shook up the city government

A husband, visiting his wife at the municipal hospital, listened to her complaint about the watery quality of the milk used in her eggnog . . . The husband forwarded her complaint to the SCRIPPS-HOWARD editor.

An investigation revealed that a political clique was selling the hospital skimmed milk at the price of rich milk . . . and getting a juicy rake-off from the dairies.

This led to a militant probe of the whole city administration, which was found to be freighted with graft, inefficiency and extravagance. The daily stories, printed by the SCRIPPS-HOWARD Newspaper, of hospital patients neglected, city funds misappropriated and criminal mismanagement generally, aroused the public to impressive action.

The leading citizens volunteered for municipal duty; the reigning commission was overthrown; and a city manager of unquestioned ability and honesty was elected.

Not only the hospital, but the entire city, was happily rid of abuses long tolerated. This is no isolated example of the service rendered by SCRIPPS-HOWARD Newspapers. In 25 cities, SCRIPPS-HOWARD editors are leading the fight for public welfare against individual avarice and selfishness . . . It is a fight that pays, not only in reader-loyalty and confidence, but in the resultant reader-responsiveness which more than 2,500,000 families give, both to SCRIPPS-HOWARD Newspapers and their advertising columns.



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## Property and the Budget

Before a business can be intelligently budgeted, all predictable elements of cost must be known. Foremost among these are fixed charges against property. American Appraisal Service furnishes the basis for computing these.

### THE AMERICAN APPRAISAL COMPANY

A NATIONAL ORGANIZATION

## Where Does the Retail Dollar Go?

How much is spent for radio, hosiery, cigars, automobiles?

YOU will find the complete answer in "Retail and Wholesale Trade of Baltimore, Maryland." This detailed report has been published by the Domestic Distribution Department of the United States Chamber of Commerce. It presents the final figures on the first trade census—made in Baltimore by the United States Bureau of the Census.

A mathematical picture of distribution in one of the chief cities of the country. Of value to merchants, economists, manufacturers, advertising men—to everyone who is interested in commercial and industrial growth.

"Retail and Wholesale Trade of Baltimore, Maryland," is a report of 58 pages, complete in every sense of the word. It contains the divisions of retail expenditures in 71 commodities, and is illustrated with charts.

Copies of this report may be obtained at 25 cents each

DOMESTIC DISTRIBUTION DEPARTMENT

U. S. Chamber of Commerce

Washington, D. C.

steamers, it cannot provide the crews to man them. Undoubtedly the arrival of some hundreds of new ships in the Atlantic would be a source of anxiety to British owners, especially if the American shippers should decide to institute a rate-cutting campaign, but the British mercantile marine has nothing to fear from fair competition. If American industry invades the European markets with its cheaply produced goods, British manufacturers will be forced to improve their methods and reduce their costs. Here again, however, quality will tell in the long run; but the movement toward international cartels among the European states is likely to be hastened during the next few months. American trusts, with their huge reserves of capital, can be met and defeated only by European trusts.

### Our Virtues Are As Transparent As Our Films

It is HIGH time some one entered the lists to champion the cause of the United States of America, the "great Republic of the West,"

declares the writer of an article in the *Natal Mercury* of Durban, South Africa. If the Old World does not always rate America first in war or first in peace, there is small doubt that she is first in films, as the writer rhetorically says:

Need one unduly emphasize the spiritual uplift that the world is daily, and twice nightly, experiencing through the monopoly justly achieved by American impresarios in the great new domain of the cinema film? The New World is leading the Old World gently by the hand, out of its primitive paths of ancient culture, into the full enjoyment of enlightened modernism.

Though the old Edens may have failed us, Hollywood is giving us a new haven. The great Democracies of not Europe alone, but of the untutored East, are having revealed to them, on the Americanized film, new conceptions of humanity and its brighter destiny. Tender, but true sentiment, strong action drama, peerless six-shooter heroes, beautiful but virtuous womanhood in all its glories, and inimitable refined clowning, are gradually replacing the outworn and decadent classics of the Old World. Film captions are opening up a new and momentarily new epoch in literature. All this we owe to our American cousins.

### We Can Keep Records, And Break Them, Too

AGAINST the lament of historians and economists over the destruction of old business records, the *Manchester Guardian Com-*

*mercial* takes note of the Business Historical Society, with headquarters in Boston in close contact with the Harvard Graduate School of Business Administration. To quote:

Of course, we do not do such things so magnificently here, although we have probably much more material to go at if business people would only hand over their old records to a university or a public library. The American Society has already accumulated 50,000 bound volumes and hundreds of thousands of reports, statistical series, and documents.

It is rather startling to read in the cir-



cular asking for members that its "value (present)" is "assistance in establishing historical backgrounds for speeches and literary work; the accumulation of data for special research, the recording of valuable work performed for posterity." No one but an American would have thought of putting advertising first.

### Hats Across the Sea Via Radio

THE STORY that fashion drawings can now be sent by wireless across the Atlantic so that "it is possible, thanks to the radio photographs, for a new Paris hat or costume to be worn in New York twenty-four hours after it has been designed" suggests to the *Manchester Guardian Weekly* "some express revolutions of fashion's famous wheel." That "wheel," as the *Guardian* sees it,

is always supposed to be turning full circle, but it may soon be revolving so fast that there will hardly be time to get one hat on before another one has flashed across the ocean to take its place. It is faintly reminiscent of the limerick:

... young lady called White,  
Who was several times swifter than light;  
She went out one day  
In a relative way  
And came back on the previous night.  
She will soon be able to return wearing  
one of the hats the day after tomorrow.

### A Touch- stone Goes Farther in Small Pieces

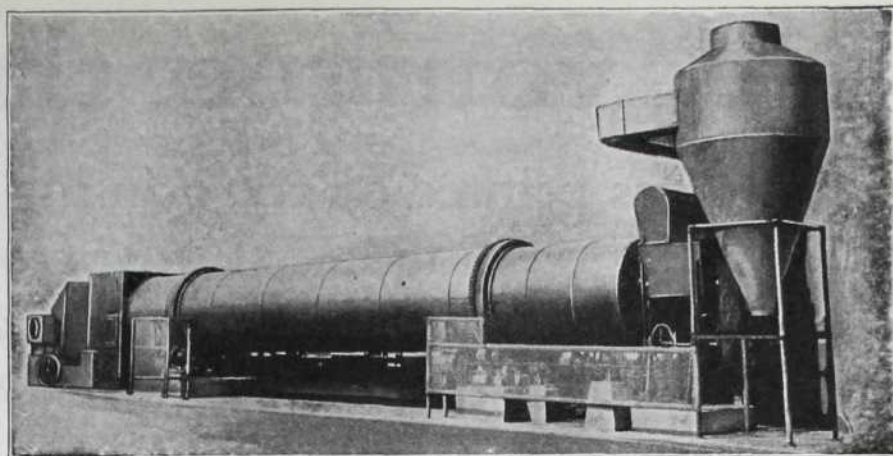
IT IS A welcome relief to the *Manchester Guardian Commercial* to have a report on American prosperity "which avoids the mysterious and dithyrambic, and confines itself to an attempt to set down the facts."

This "Report on Economic Conditions in the United States of America," prepared by two representatives of the British Government and issued by the Stationery Office in London, "incidentally, succeeds in breaking some of the touchstones which we have been so busily engaged in passing round."

The temper of this "breaking" is suggested in the consideration of wages, as in this extract:

... it is well to dispel an erroneous impression which appears to be fairly widespread in Great Britain to the effect that American employers worked out a philosophy of high wages and embarked upon a settled policy of increasing wage rates with the conscious object of augmenting the purchasing power of the working population. The regulation of wage rates has responded rather to the ordinary working of the law of supply and demand, and to ordinary, and sometimes violent methods of adjustment.

No year has elapsed since the war without its record of strikes and labor disturbances, occasioned either by the attempts of the working forces to secure advances in wages or by those of the employers to reduce them. Such disputes were both numerous and serious while the country, in 1920-22, was still suffering from the shock of the post-war price deflation and they



## 5 Ways to Cut the Cost of Drying Bulk Materials

- 1 **The first way is to permit Louisville Drying Engineers to make a thorough study of your drying problems.** They will recommend a Louisville Rotary Dryer which will greatly reduce your drying costs by . . .
- 2 **Drying from 5 to 10 times faster,** and permitting of uninterrupted plant operation by delivering dried material continuously.
- 3 **Slashing fuel expense from one-third to one-half.** This is because Louisville Dryers utilize 50% more of the heat input than do many other dryers.
- 4 **Cutting number of attendants to one in many instances.** Louisville Dryers require little attention as they are automatic and continuous from feed to discharge.
- 5 **Reducing amount of space required as much as 80%.** A Louisville Dryer occupying 120 square feet will replace another type of dryer requiring 600 square feet.

In addition, Louisville Dryers eliminate objectionable odors, diminish dust losses and in many instances increase the market value of the dried product. Mail coupon for further particulars of these dryers and the free service afforded by Louisville Drying Engineers.

**LOUISVILLE  
DRYING MACHINERY  
COMPANY.**

Incorporated

Hull St. and Baxter Ave.  
Louisville, Ky.

Cable Address, Loudry, Louisville, Kentucky

When writing to LOUISVILLE DRYING MACHINE CO., INC., please mention Nation's Business

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Drying Machinery Co.,  
Hull St. and  
Baxter Ave., Louis-  
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ther particulars of the  
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ville Drying Engineers.  
No obligation.

Name.....

Position.....

PIN TO LETTERHEAD

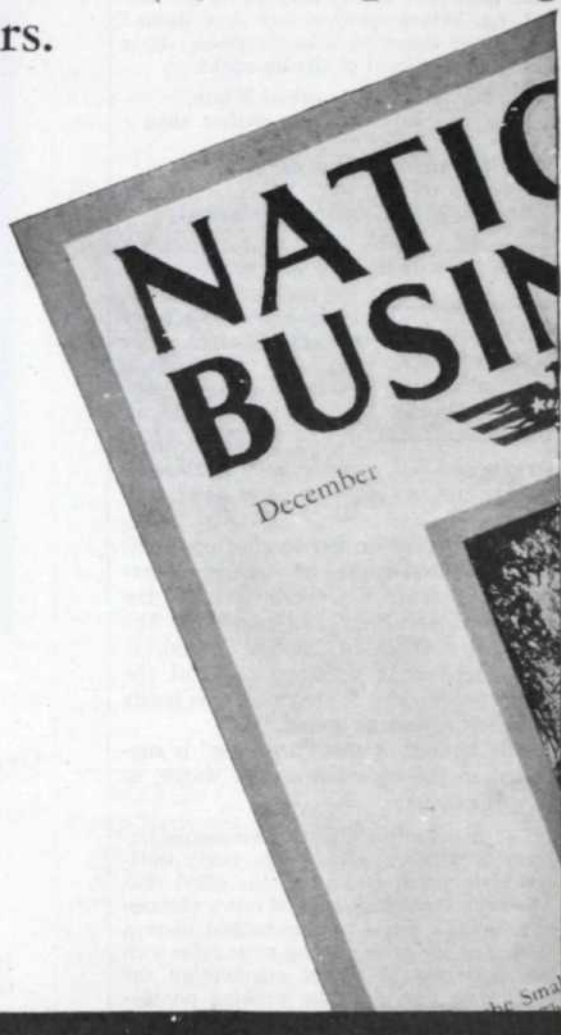


# Did you see this insert

It was printed on the printing Multigraph, in the Multigraphing Department of the Chamber of Commerce of the United States, publishers of the magazine. It cost \$293.89 as against an estimate of \$475.00. The edition of 300,000 required 600,000 impressions on account of the two colors. The job was completed (by two printing Multigraphs) in 140 hours.

Many indeed are the ways in which the Multigraph helps the business of the nation by doing good work with speed and economy.

THE AMERICAN MULTIGRAPH SALES CO.  
1806 East 40th St. Cleveland, Ohio



# *the* printing



# in "Nation's Business"?

## One Good Way to Say Merry Christmas to a Man

You have a business friend you want to remember this Christmas. One good way to say Merry Christmas to him is to give him a subscription to Nation's Business.

There are a number of reasons why this makes a suitable gift.

IT IS USEFUL. IT IS ENTERTAINING. IT IS A REPEATING GIFT. THE PRICE IS REASONABLE.

Nation's Business gives the business man what he needs—authentic information on every new development in business and in Government. It gives him new ideas—and a fuller understanding of the things that affect his business.

We will see that the first copy arrives during Christmas week. And if you wish, we will write him a special letter saying that you are the donor of the gift.

### USE THIS COUPON

United States Chamber of Commerce, Washington, D. C.

Send Nation's Business  
for three years to:

AFTER JANUARY 1, send the  
bill for \$7.50 to me:

Name \_\_\_\_\_ : Name \_\_\_\_\_  
Address \_\_\_\_\_ : Address \_\_\_\_\_  
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(Postage free to any place in the world)

9c



"UNDER THE TELEPHONE," says this  
man, "the most valuable  
business asset I have."  
My business house has  
much of work that the long dis-  
tance can do. Buying or selling  
any city without leaving one's  
home. Making important appointments  
at a giving rush information.  
Prices or prices. All business de-  
cisions discussed by telephone, just

LONG DISTANCE



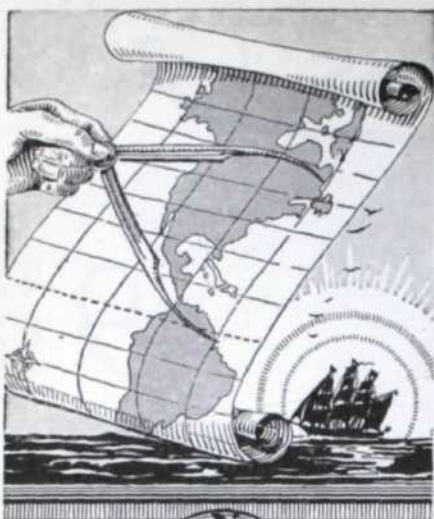
Let's Talk Low Freight Rates  
Robert S. Henry

X Stands for Selling Price  
William Boyd Craig

Page 56

# MULTIGRAPH





## Charted "SEES"

FOR you who realize that the compass of industrial expansion points Southward—Augusta has a definite message. The charts, i. e. the facts, are embodied in an informative, illustrated booklet designed both for those

Whose businesses are "under full sail;" and for those

Who want to launch their business voyage under auspicious working and marketing conditions.

Read this booklet, "YOUR PLANT—IN AUGUSTA," and you will see that Augusta has much to offer in:

Cheap Power  
Exceptional Climate  
Nearness of Raw Materials  
Adequate Transportation  
Savannah River Location  
Attractive Tax Exemptions  
Abundant Labor Supply  
Accessible, Growing Markets

After reading this booklet, we hope you will want to see even more of Augusta, and to consider it as a possible site for the location of your plant. In that event, the Chamber of Commerce will gladly prepare for you, in strict confidence, an impartial survey of conditions here as they pertain to your particular business.



CHAMBER of COMMERCE

# Augusta

GEORGIA

When writing please mention Nation's Business

still continue to be one of the normal phenomena of American industrial life, but, owing to sustained general activity in the past five years, the wage question has given rise to fewer and less important struggles than in earlier times.

The working population, on its side, has taken note of the fact that large output and high earnings since 1922 at all events have synchronized so closely as to be probably interdependent, while employers, as a rule, have recognized more clearly than ever before the fact, that, when by far the greater part of the goods they produce are sold on the home market, the wages of the labor that goes to their manufacture constitute also the most important proportion of the fund out of which the goods are purchased.

### Elasticity, Thy Name Is Not Stevenson

industry, writes "A. W. K." in the *London Spectator*. For himself, he thinks that:

having gone so far there is little to be gained in abandoning the Stevenson Restriction Scheme, and much to be said for tightening it up. For the past year, notwithstanding the Restriction Scheme, the stocks of rubber in this country have increased from about 42,000 to 67,000 tons, although there have been some increases in the restriction during the latter part of the period.

Owing, however, to the permission under the coupon scheme and to the alleged smuggling operation . . . it cannot be said that the Restriction Scheme has been really operative, while in the meantime Dutch sales have been on a large scale. All the same it may be doubted whether we should be hearing so much from America about schemes for acquiring huge plantations in this or that direction if there were not still some considerable doubt amongst rubber users in the states of the present cheapness of rubber continuing.

### And Our Autos Finish Second at Crossings!

Whether or not it is true that our railway advertising is faster than our trains, Mr. Philip Guedalla raises the interesting doubt in his book "Conquistador—American Fantasia." As quoted in the *Manchester Guardian Commercial*, Mr. Guedalla found American romance nowhere more persuasive than in railway travel, for—trains wear delicious names. "Scouts," "Pathfinders," and "Navajos," redskins of every imaginable celerity stand throbbing with steam up at platforms. The driving wheels fly round and grip the rails; and the whole caravan moves off with a last gleam from the pictorial emblem on its rear platform.

But there romance ended. For, as the town goes by, it moves sedately; but through the wider world beyond it moves sedately still.

The "Raider" ambles across a continent at twenty miles an hour, rising at unusual moments to twenty-five; "Scouts" race behind it, but no faster; and the "Navajo" flutters his eagle feathers with the same

## We Will Give You Reliable Information About Canada



**DEVELOPMENT  
BRANCH:** For information regarding the mining industry of Canada, the development and supply of industrial raw materials available from resources along the lines of the Canadian Pacific Railway, consult this branch.

We have an expert staff continuously engaged in research relative to all resources including the examination of mineral deposits. Practical information is available concerning development opportunities, the use of by-products, markets, industrial crops, prospecting and mining.

**BUREAU OF CANADIAN INFORMATION:** The Canadian Pacific Railway, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. Our Reference Library, at Montreal, maintains a complete data service covering Natural Resources, Climate, Labor, Transportation, Business Openings, etc., additional data constantly being added to keep it up to date.

**CANADIAN PACIFIC RAILWAY CO.**  
Department of Colonization and Development  
J. S. DENNIS  
Chief Commissioner  
Windsor Station  
Montreal, Can.

# Clean with

**AND save money!**  
Oakite cleaning means better, faster, easier cleaning—higher quality and lower costs, calling for no radical change in your equipment. Our Service Men will give you details. Write us.

Oakite Service Men, cleaning specialists, are located in the leading industrial centers of the United States and Canada.  
Oakite is manufactured only by  
**OAKITE PRODUCTS, INC.**  
24A Thames St., New York, N. Y.

# OAKITE

Industrial Cleaning Materials and Methods

When writing please mention Nation's Business



gentle pace. Even the terror of the continent averages a genteel forty-eight. This mild progression affords a pleasant shock to Europeans mesmerized by impressive nomenclature and the legend of American speed.

And of the locomotive bells which are rung at every grade crossing, he writes:

Our locomotive clanged the dismal bell, that carries to every British ear a hint of Sunday morning—nothing seems odder to Englishmen than rolling across a continent behind a disembodied Sabbath.

### No Train of Thought Enters a Closed Switch

IN AMERICA the listener to a radio program is "lucky if he does not find that oftener than not he is being regaled with an advertisement of a laundry or a bakery." With advancing that opinion the *Manchester Guardian Weekly* gives its belief that perhaps Britain is better off with "its more austere system." Of the problems raised by the increase of broadcasting stations it says:

Of course, not all programs are commercial, but where almost every station is run for private profit it is pretty certain that the astute and relentless advertiser will be hard to avoid.

The restrictions imposed on broadcasting in this country do, of course, bring some disadvantages with them.

There are many people who would like to hear broadcasts on controversial topics or to be instructed on subjects which have only a sectional and limited appeal. Private broadcasting stations would provide some people with what they want and cannot at present have.

But since the price of them would be the throwing upon the air of many things which most of us would wish to dodge, perhaps we are better off with our more austere system.

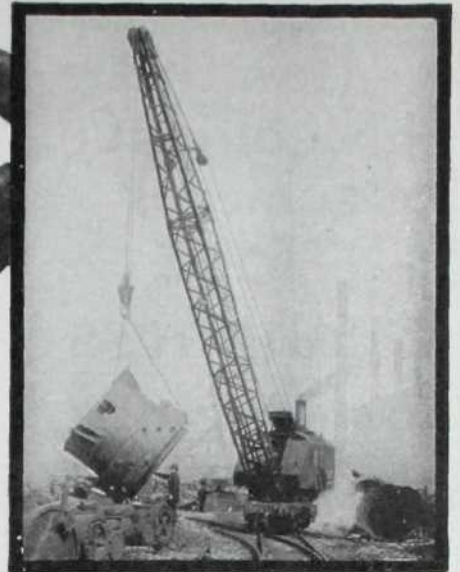
### Some "Movie" Caption Writer's Hand, No Doubt

OF ALL the sights in Los Angeles, the "trick eateries" most impressed a visiting British journalist. At home he would know them as freak restaurants, but in commenting on his travels, the *Manchester Guardian Weekly* is minded to use "the jocose American term."

These "grotesque establishments" were found there in remarkable number and variety—

One on a prominent boulevard is shaped like a Derby hat, another like an ice-cream freezer, and another like an Eskimo hut dripping with icicles of papier maché. There is a jail with iron bars and waiters garbed as convicts. The bull fight cafe has in the center a live bull in a pen, and matadors and picadors serving the guests. Considerable ingenuity has been expended in finding names for the cafes of Los Angeles, and such signs as "The Lost Shack," "The Frying Pan," "The Covered Wagon," "Stove Pipe Charlie's," and "The Barney Google" are common. Presumably with the intention of luring customers to enter by a suggestion that they will feel thoroughly at home, one cafe that makes a specialty of chicken dinners has put out a sign—"Eat with your fingers."

Reproduced from the original bronze with the permission of the American Sculptor, Max Kalish.



## Your Machinery Personnel

Much is being said and done today about choosing the right man for the job. That's why most sizeable concerns now have an employment manager whose business it is to choose the best labor available.

But what about your material handling personnel? Have you given enough attention to that most important phase of your plant operation—a phase representing, perhaps, the work of hundreds of men?

A giant mechanical workman—like the above 35-ton capacity Industrial Brownhoist locomotive crane—handles its great loads and does the work of scores of laborers. Why not put one of these great workmen on your job and save money and man power? There's a type and size for every purpose.

Industrial Brownhoist Corporation

General Offices: Cleveland, Ohio

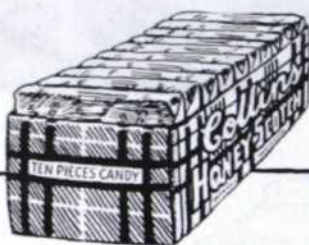
District Offices New York, Philadelphia, Pittsburgh, Detroit, Chicago, St. Louis, San Francisco, New Orleans and Bay City, Michigan.

# INDUSTRIAL BROWNHOIST

When writing to INDUSTRIAL BROWNHOIST CORPORATION please mention Nation's Business



How the  
J.N. Collins Co.  
achieves  
"100%  
cleanliness"  
at reduced cost.



**M**R. F. L. Brost, Superintendent of the Collins Co., Philadelphia, makers of Collins Honey Scotch and Walnettos, says: "Health officers and state inspectors consistently rate us 100% in cleanliness and sanitation. Clean floors are the basis of factory cleanliness, and we use the FINNELL SYSTEM of Electric Scrubbing. To maintain anything like the present cleanliness of our 12,500 sq. ft. by hand scrubbing would require double the number of help. So the FINNELL SYSTEM is saving at least \$1,300 a year in scrubbing labor, which pays for our equipment more than 3 times a year."

"Our cleaning cost now is about 8 cents per sq. ft. per year. It would cost at least 16 cents by hand. Our saving on mops, brushes and soap more than offsets the cost of the current for the FINNELL machine."

#### Your floors, too, can pay dividends

Hundreds of America's leading factories, stores, office buildings, institutions—both small and large—use the FINNELL to scrub and polish their floors. It pays dividends—not only in dollars saved—but in improved products, better working conditions, increased patronage, and greater public esteem. Learn how the FINNELL can do these things for you. For full information write The FINNELL SYSTEM, INC., 52 East St., Elkhart, Ind. (Factories, Elkhart, Ind., and Ottawa, Can. District offices in principal cities in U. S. A.)



IT WAXES  
IT POLISHES  
IT SCRUBS

**FINNELL**  
ELECTRIC FLOOR MACHINE

When writing please mention Nation's Business

## NEWS OF ORGANIZED BUSINESS



The Chamber of Commerce of the State of New York is founded April 5, 1768, as part of a movement against British tyranny

**N**EITHER our national nor our state governments are planned or equipped for the task of government operation of utilities. The fathers purposely made our government to a different model, for a different task. They divided power and responsibility, where business must concentrate them. They thought liberty and individual rights were worth safeguarding.

This very fact leaves to private enterprise many things which other nations can, if they prefer, do through government—after a fashion. On the governmental side the result has been one of which we are as proud as other people are envious. On the business side the accomplishment far surpasses anything they know. Through the one we have liberty; through the other, enterprise and decisiveness.—HERBERT HOOVER.

#### Playing the Landlord

EVERYTHING was ready. The local chamber had an industrial prospect ready to locate in its city provided a building was fixed up for him. This the owner of the building refused to do. There was no local industrial financing corporation to turn to nor apparently any other local agency that could undertake the repair of the building except the chamber of commerce. Was it part of the chamber's job to repair the building?

This question recently faced a chamber. It asked the National Chamber for an answer. In his reply, F. Stuart Fitzpatrick of Organization Service, dealt with some very important questions in regard to financial policies.

Unless a chamber wants to enter into a policy of giving bonuses to induce new industries, the job of repairing the building was one for the industrial real estate companies or the investors or both to handle. In other words, at this point in the negotiations, excluding a bonus giving policy, it was up to private interests to seize the opportunity which the chamber created and to provide facilities suitable to the prospect and at a reasonable profit to themselves.

The principle behind this answer is that the best results in laying out and selling industrial sites, in building and financing factory buildings for sale or for rent, are obtained when these matters are left to the initiative and enterprise and, most important of all, to the judgment of private parties—reputable real estate men, bankers, investors, property owners. This is a principle that underlies our whole economy. Experience shows that chambers are not adepts in trying to solve these problems in some other way. Because of the pressure for new industries and because a chamber is a non-profit organization with only its reputation at stake, it will in nine cases out of ten, see the new industry's

prospects of success through the colored glasses of expectancy rather than through the clear glasses of critical business judgment. Your own experience will undoubtedly support this.

Assuming that the facilities in a given community are not adequate to meet the needs of financing small new industries, then it strikes us that the only sensible procedure is to create an organization in the community with funds or credit available to finance such manufacturing enterprises. Even where the financing of new industries has been gone about in this systematic way, through a fund outside the chamber and controlled by outstanding business men, the record has been one of many failures as against a few successes. There are only three or four such enterprises that have been in successful operation for a decade or longer.

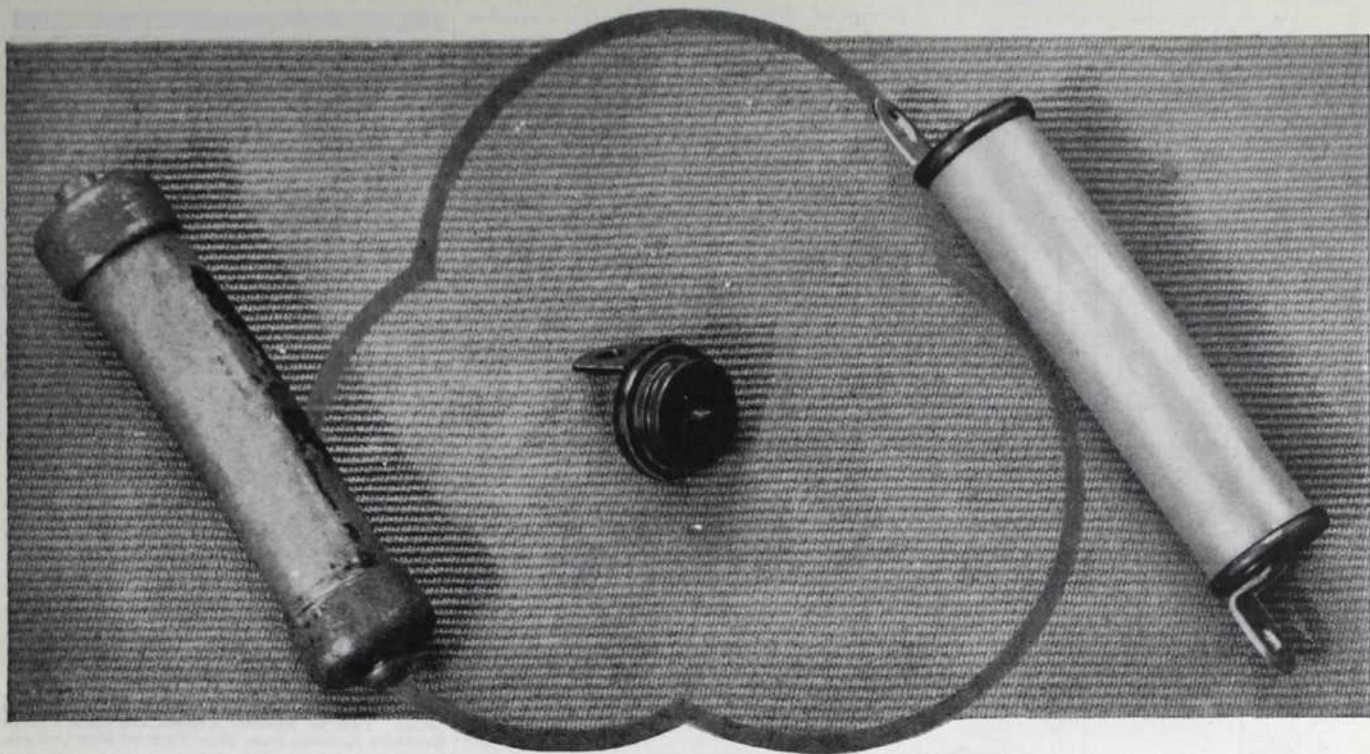
However, the argument has not been finally decided against community industrial financing organizations. The bonus, of course, falls in another category.

The bonus is an unsound method of community competition for new industries. It will never be wiped out until communities in given industrial districts, all of which have about the same advantages, work out some practical arrangement for joint industrial promotion work, with an agreement among them that they will under no circumstances give a bonus to any new industry, or, for that matter, to any industry which threatens to leave the district.

There is one other way of financing new industries. That is for the chamber to turn the prospect over to a small group of investors, with the results of the chamber's investigations, for the purpose of giving these investors, as investors, an opportunity to examine the matter and to decide whether or not they themselves and others they may ask should subscribe to stock in the new enterprise.

It will be recognized by a responsible





(At left) Condenser as originally made with Metal Caps. (Center) Bakelite Molded end piece with contact strip embedded (At right) New type condenser with Bakelite Molded end pieces. Made by Pittsfield Mfg. Co., Pittsfield, Mass.

## Design improved and production simplified through Bakelite Molded

THE shell of this ignition condenser was formerly made of a fibre tube with metal end caps, a construction that required a number of production and assembly operations. Now that Bakelite Molded has been adopted for the caps, and a metal tube for the shell, production and assembly have been simplified and design improved.

Through the use of Bakelite Molded, two drawing operations and blanking, drilling and tapping have been eliminated. A metal contact strip is accurately and firmly embedded during the molding operation. A groove molded around the end piece permits the metal tube to be

wedged into place, making a lock joint that will not work loose. Appearance of the part was improved.

This case is merely typical of hundreds of others where the use of Bakelite Molded has made possible both simplified production and improved design. It may possess equal advantages for your own work.

### Bakelite Engineering Service

Bakelite Sales and Service Engineers are located in important industrial centers throughout the country, and they are equipped to render prompt and helpful cooperation to present and prospective users of Bakelite Materials. The Bakelite Corporation places at their service the facilities of its extensive laboratories, and its unequalled experience in the practical application of phenol resin products to industrial needs. Write for Booklet 42 "Bakelite Molded."

### BAKELITE CORPORATION

247 Park Avenue, New York, N. Y.; Chicago Office: 635 West 22nd Street  
BAKELITE CORPORATION OF CANADA, LTD., 163 Dufferin Street, Toronto, Ont.

# BAKELITE

REGISTERED

U. S. PAT. OFF.



THE MATERIAL OF A THOUSAND USES

"The registered Trade Mark and Symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital 'B' is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."

When writing to BAKELITE CORPORATION please mention Nation's Business





## Clevelanders Prefer the CLEVELAND

THEY, who know it best, prefer Hotel Cleveland for its exceptional food, its quiet but friendly service, its furnishings and atmosphere of a luxurious home.

Clevelanders who are accustomed to the best the city affords, lunch and dine here every day and recommend this hotel to out-of-town friends. They consider it—as you will—more like a private club than a hotel. Yet rates for many rooms are as low as \$3, and a moderate priced Lunch Room supplements the main dining rooms.

Hotel Cleveland is on the Public Square, convenient to all parts of the city. Every room has private bath and servitor service.

# C HOTEL CLEVELAND

PUBLIC SQUARE, CLEVELAND

When writing please mention Nation's Business

group of this kind outside the chamber that all such investments are of a speculative character. Hence such a group will not ask people who cannot afford to lose their money to invest in the enterprise in question. Furthermore, it is legitimate for such a group to take into consideration the need of a community for this particular industry.

The chamber is not dodging the issue when it turns such a prospect over to a group of investors and leaves it entirely to them to make the financial decision. What it is doing in such a case is refusing to allow the chamber's name to be used to induce people to speculate who cannot afford it. It is simply a fact that when a chamber endorses a stock issue or puts on a campaign to sell stock, it places this stock in the minds of many people in the class of safe investments, whereas everyone knows that such investments are speculative, usually highly so. It is simply playing the game on the square for a chamber to do that sort of thing. In other words, a chamber of commerce should not do something which a decent and right-minded group of investors would not do.

It has been said, and with considerable force, that, if chambers do not cease endorsing stock and underwriting the financing plans of industries, communities will have to appoint committees to protect the people against the chamber.

### Trade Association Advertising

A BUREAU of Research and Education has been set up under the auspices of the International Advertising Association. The work is under the direction of a competent man who has no connection with advertising and its purpose is to find facts in regard to the results of advertising. Walter A. Strong, publisher of the *Chicago Daily News*, is the head of the committee in charge of the Bureau. The American Trade Association Executives have requested that a committee be set up to cooperate in making an investigation of the results obtained by cooperative advertising.

Raisin producers, yeast and electric toaster manufacturers and others are helping the Institute of Baking (a research laboratory of the baking industry) advertise bread. This has meant millions of dollars of free advertising, but the problem of co-operative advertising is not always as easy as that.

The Greater Marketing Division of the Automotive Equipment Association has a million dollars a year for three years to spend on its market promotional work. As an example of the work, it put on a campaign in New York State to have all automobiles inspected. The theme was "Save a Life." The results were that 1,250,000 cars were inspected and jobbers more than doubled their business.

### "How's Business?"

BUSINESS is finding out that in nine cases out of ten the answer "fine" is the result of conditions that have been controlled. But whether the answer is "fine," "poor" or "bad," business men are asking, "How can my business be improved?" It is this question that the Domestic Distribution Department of the National Chamber welcomes.

The Department is constantly engaged in giving immediate and practical assistance to those who are putting their time and energy into that interesting and rap-

## 30% Less to operate in SPARTANBURG—and Construction Costs are 20% Lower

Get the Facts—this book tells all



BUILD YOUR PLANT, as many of the country's leading concerns have already done, in Spartanburg, where profits are not "eaten up" by labor costs nor jeopardized by labor disturbances.

With ideal living and working conditions, labor is plentiful, faithful and healthy. Here labor turnover is negligible and a full day's work the rule.

### Spartanburg Has Other Advantages

**TRANSPORTATION**—Two trunk lines to Middle West. Two to Atlantic Coast. On main line of Southern Railway from New York to New Orleans.

**POWER**—In the center of the country's great hydro electric area. Ample power at low rates.

**COAL**—In close touch with great coal fields. Best grades of steam coal obtained at low cost.

**WATER**—Four large rivers and many small bold streams assure abundant year-round supply.

**LABOR**—White, All-American, Intelligent. Used to longer hours and productive work. Labor unrest unknown and labor turnover almost negligible.

**TAXES**—"No taxation tricks." Taxation basis very favorable to successful industrial operation.

**AIR MAIL**—Regular stop on U. S. Postal Air Mail Route, 6 hours to New York.

**GET COMPLETE DETAILS**—Write for survey applying to your own product. You will be surprised to learn how much more economically it may be manufactured here. Your investigation costs you nothing.

INDUSTRIAL COMMISSION • CHAMBER OF COMMERCE  
1400 MONTGOMERY BUILDING • SPARTANBURG, S. C.

## SPARTANBURG



The Hub City of the Southeast

## SOUTH CAROLINA

### The Benefits of a Southern Trip ... through ULTRAVIOLET

The Alpine Sun Lamp, used under the direction of a physician, will often afford all the healthy tan, the abounding vitality and the physical fitness that are the expected benefits of a journey to the Southland. You should know the facts about this important aid to healthful living.

FREE



Write for Booklet  
HANOVIA CHEMICAL & MFG. CO.  
Dept. E  
Newark, New Jersey



When writing please mention Nation's Business



idly changing business of selling merchandise. Its work is to help business men to understand and use the merchandising methods which have proved most profitable in actual practice.

Retailers, wholesalers, warehousemen, and manufacturers are finding that the Department has simple, practical methods which can be applied immediately and bring results. Whether its work is with individuals or with trade associations, the net effect of the services which the Department renders is to improve distribution as a whole.

NATION'S BUSINESS will be glad to send to interested people a copy of a booklet, "How's Business?" which describes the work of the Domestic Distribution Department of the National Chamber.

### Chamber Pictures Wanted

THE NATIONAL Chamber and NATION'S BUSINESS are interested in making a complete file of pictures of buildings owned by chambers of commerce. NATION'S BUSINESS would like to have these pictures on hand so that from time to time, as opportunity presents, it may publish them.

### Developing Trained Workers

A DISASTROUS shortage of skilled journeymen impends. For several years the supply of foreign tradesmen has been dwindling, and industry is facing the problem of apprentice training. The Department of Manufacture has studied the problem of such training and is prepared to render assistance relative to these matters.

How can a chamber of commerce aid in the development of an industrial apprentice training program? The Industries Committee of the East Chicago, Indiana, Chamber of Commerce has studied this problem during the past eight months. It has gone into the details incidental to conducting an apprentice training program and has weighed carefully the needs and possibilities for its establishment in East Chicago. This chamber favors the establishment of a training program by the local school system in cooperation with local industries and the chamber. A program for a community industrial training program has been prepared. The secretary of the East Chicago Chamber will undoubtedly be glad to furnish to anyone interested information on the work proposed.

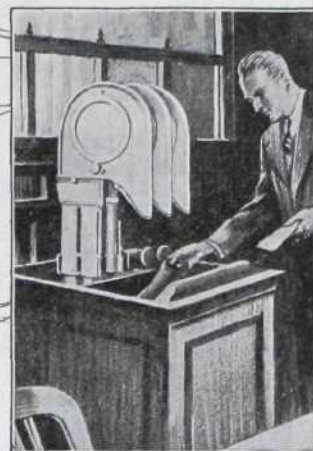
### Plan for National Defense

THE FORT WAYNE Chamber has an active National Defense Committee which has put into operation a definite plan for civilian cooperation with the Government in making effective the policies and purposes of the National Defense Act.

Among other things, the committee has aroused interest in the Citizens' Military Training Camps and the R. O. T. C. Junior Units; in airports, in the development of the National Guard, in the annual national defense day and in other defense meetings.

The chairman of this Defense Committee has prepared a detailed report discussing the National Defense Act and setting forth the tangible things which a civilian group may do, and, as a matter of fact, have done in Fort Wayne. Those inter-

# Winged Messengers



*.. bring departments elbow to elbow*

Today American enterprise crowds three days' efforts into one . . . but the confusion of human inter-departmental communication is gone. Lamson Pneumatic Tubes have inaugurated a new era.

Swiftly . . . surely . . . silently linking desk to desk, office to office, building to building in one co-ordinate network, carriers fly through Lamson Pneumatic Tubes. They do for the written message and the small package, what the telephone does for the spoken word. The success of mass effort . . . the product of multiple endeavor is based upon rapid . . . and still more rapid communication.

Lamson Winged Messengers have served commerce and industry for over fifty years. They are not just letter carriers, but are the highways between separated departments. They eliminate confusion . . . they speed business.

Let us send you our book telling what Winged Messengers will do for your business.

**LAMSON Serves**  
Public Utilities  
Manufacturers  
Mail Order Houses  
Railroad Terminals  
Retail Stores  
Insurance Companies  
Steel Mills  
Banks  
General Offices  
Automobile Agencies  
Newspapers and Publishers  
Wholesalers  
Investment Brokers  
Hospitals  
Hotels

And Will Serve You

THE LAMSON COMPANY  
3000 James Street, Syracuse, New York

# LAMSON PNEUMATIC TUBES

Coordinate the Departmental Interchange  
of Papers, Files and Packets



# More and more, today, an important letter is expected to look important



A letter from the executive head of a business . . from a lawyer . . a doctor . . from an insurance broker or bond house . . or indeed *any* important business letter . . .

People these days expect an important letter to *look* important. To stand out from the pile of routine mail.

Crane's Bond is an investment in prestige—a letterhead with a real dollars and cents value . . It has become the almost inevitable choice wherever the requisition reads "the best".

Crane's is *quality* — 100% new white rag. It looks and *feels* quality — sturdy, crisp, tough, distinctive.

*It costs more than the usual letterhead but much less than you may have imagined. Indeed, the difference over intermediate grades on {say} 5000 letterheads is seldom more than a matter of perhaps eight or ten dollars.*

On your next order, ask your printer or engraver to submit samples and prices on Crane's Bond along with the paper you're using now. Envelopes to match, of course . . . You have only to compare the *feel* to understand why Crane's is so widely used.

## Crane's Bond

CRANE & COMPANY, INC. · DALTON, MASSACHUSETTS

When writing to CRANE & COMPANY, INC., please mention Nation's Business

ested may obtain a copy of this report from the Fort Wayne Chamber of Commerce at its cost of reproduction, 35 cents.

### Aviation Industry Growing

TWENTY-TWO of the fifty-eight first-class landing fields in California are municipally owned, according to a report of the Aeronautical Department of the California Development Association. The report shows a 400 per cent gain in municipal fields and a 200 per cent gain in privately owned fields in the last five years. As a strictly industrial factor, this industry is beginning to take a prominent place. One factory alone employs 500 men on a year-round basis. Besides aircraft factories, there are many part and motor companies. Fifteen aviation flying schools are teaching hundreds of Californians how to fly. California seems to be taking the lead in the development of the industry.

### Flax Growing Filmed

A FILM showing the making of linen out of flax grown in Oregon was recently taken by the Portland, Oregon, Chamber of Commerce. This is the first time, according to the Chamber, that linen cloth has been made on a commercial scale in this country out of flax grown in the same state in which the cloth was manufactured. The Chamber was able to sell the film at a slight profit to one of the large distributors who guaranteed at least 60,000 presentations.

### Foreign Trade Notes

NATURAL resources, manufacturing, distribution, engineering, the fine arts and the sciences will all be represented at the Exposition of Barcelona to be held from April to December, 1929. The Spanish Government is backing the exposition, and already many European and some Asiatic countries have signified their intention of setting up exhibits.

Barcelona offers free port facilities. This gives exhibitors an opportunity to dispose of their products without paying customs duties. Exhibits and stock can be stored in the free port after the exhibition and reshipped to other countries in Europe and the Near East at the convenience of the exhibitor.

The American Chamber of Commerce in Spain, located in Barcelona, has offered its assistance to American participants in the exhibition. Further information may be obtained from the Exposition of Barcelona. Delegate to the United States, Steinway Hall, New York City.

A Chamber of Commerce of construction companies has been organized in Buenos Aires, according to a report received by the Department of Commerce. Its aim is to improve the ethics of the business, to secure modification of the present public works' law and to secure uniformity of specifications in various works to be undertaken by the government.

The Stockholm Chamber of Commerce has recently acquired its own building. In order to increase its usefulness the Chamber has set aside several rooms for private conferences on business matters. The Chamber offers its extensive informational facilities to business men who desire to use it during their visits.



### Trade Association Objectives

TRADE associations are as many and varied as are the industrial and commercial activities of our complex society, F. Stuart Fitzpatrick of Organization Service points out in his news letter on trade associations. Their differences are obvious and striking. What are their similarities? Have trade associations a common denominator?

These things are important from the point of view of providing service facilities for trade associations and from the viewpoint of the *esprit de corps* and the building up of a professional organization among trade executives. These things depend upon a group of men becoming self-conscious.

While not attempting any final answer to these questions, a brief summary of trade association activities reveals that they have several important objectives in common. Keeping in mind that trade associations are organizing group competition, we may classify their activities thus:

1. Offensive weapons of group competition.

(a) Cooperative activities which seek new and enlarged markets.

(b) Cooperative activities which seek to increase efficiency and lower costs.

2. Defensive weapons of group competition.

(a) Cooperative activities which seek to overcome predatory attacks from within or without the industry.

(b) Cooperative activities which seek to make the individual enterprise an informed and intelligent competitor.

### Coming Business Conventions

(From Information Available January 10)

Date	City	Organization
February 1-3	El Paso	American Association of Wholesale Hatters.
1-4	Los Angeles	Western Fruit Jobbers Association of America.
1-2	Chicago	The Hollow Tile Building Association.
5-11	Atlantic City	American Ceramic Society.
6-9	Miami	National Association of Builders Exchanges.
6-7	New York	National Association of Retail Secretaries.
6-10	New York	National Retail Dry Goods Association.
6-8	Seattle	Pacific States Butter, Egg, Cheese and Poultry Association.
6-11	St. Petersburg	Tile and Mantel Contractors Association of America.
6-9	Atlanta	Mason Contractors Association of U. S. and Canada.
7	New York	Corset and Brassiere Association.
7	New York	National Retail Milliners Fashion Convention.
7-10	Toronto	Merchant Tailor Designers Association.
7	Cleveland	American Boiler Manufacturers Association.
8-9	Boston	New England Builders Supply Association.
8	Atlantic City	National Brick Manufacturers Association.
13-17	Washington, D. C.	Common Brick Manufacturers Association of America.
13-17	Philadelphia	Pennsylvania and Atlantic Seaboard Hardware Association.
14-17	Chicago	Chicago Power Show.
14-17	Houston	International Association of Master Painters and Decorators of U. S. and Canada.
15-16	Washington, D. C.	International Cut Stone Contractors and Quarrymen Association.
15-16	Chicago	Midland Confectioners Association.
Wk. of 20	New York	American Paper and Pulp Association.
20-22	Boston	New England Hardware Dealers Association.
20-22	New York	National Association of Paint Distributors.
23-25	Salt Lake City	Western Retail Lumbermen Association.
27-Mar. 3	Philadelphia	National Gift and Art Association.
28-29	Chicago	Fire Underwriters Association of the Northwest.
28-Mar. 1	Philadelphia	American Concrete Institute.

## AMERICAN RADIATOR COMPANY

### hastens shipments with this TELEGRAPHING TYPEWRITER



In Chicago the American Radiator Company maintains two circuits of Teletype . . . the Telegraphing Typewriter . . . to transmit orders from its downtown office to its warehouse miles away.

As orders are typed in the downtown office, the warehouse machines produce identical *typewritten* copies from which shipments are made. Time-consuming messenger trips are thus done away with and shipments are correspondingly hastened.

Moreover, as the sender sees what is being printed by the receiving machine, errors in transmission are practically eliminated. Teletype requires no special operator, but may be used by any typist.

### TELETYPE'S MESSAGES ARE RECEIVED IN THIS TYPE

Teletype legibly *prints* its messages on the ordinary typewriter page or on forms. Therefore it is virtually impossible to misread a Teletype communication.

One sending machine will transmit messages to 1 or 100 remote spots *simultaneously*. Thus orders and other instructions can be broadcast to every corner of your plant at the rate of 60 words per minute.

Teletype service is not expensive, and will pay for itself again and again by eliminating errors, doing away with messengers and speeding up production.

Teletype is used by industrial organizations, telegraph and cable companies, press associations and railroads. Without obligation, permit us to demonstrate how Teletype can save time and money for you.

## TELETYPE

### THE TELEGRAPHING TYPEWRITER

### PIN to your letterhead

For further information, sign this coupon, pin to your letterhead and mail to Morkrum-Kleinschmidt Corporation, 1410 Wrightwood Avenue, Chicago.

Your name.....

N. B. 2-28

### Now You Can Get Action

#### Without Waiting on the Printer with MULTISTAMP

The most modern and complete office printing plant known



Write for Catalog and Samples of Work

The quickest, easiest, simplest—most economical known means of duplicating letters, post-cards, notices, forms, etc. Type—handwrite or draw on a dry stencil—attach it to MULTISTAMP—print perfect copies on paper, wood, metal, cloth—any smooth surface—40 to 60 a minute—right at your desk.

MULTISTAMP is made in three sizes—letter, post-card and rubber-stamp

It is built to do service and pay dividends in time and money saving. GUARANTEED. More than one hundred thousand now serving all kinds of business throughout the world.

**No. 1 Outfit**—With complete Equipment, including 25 Stencils, Ink, Stylus Pen, etc. Unequalled for addressing shipping tags and labels. (F. O. B. factory—weight 1 lb.) . \$7.50

**No. 5 Outfit**—Letter size, with complete equipment, including Black Enameled Container, 24 Stencils, Ink, Stylus Pen, etc. (F. O. B. factory—weight 5 lbs.) . \$25

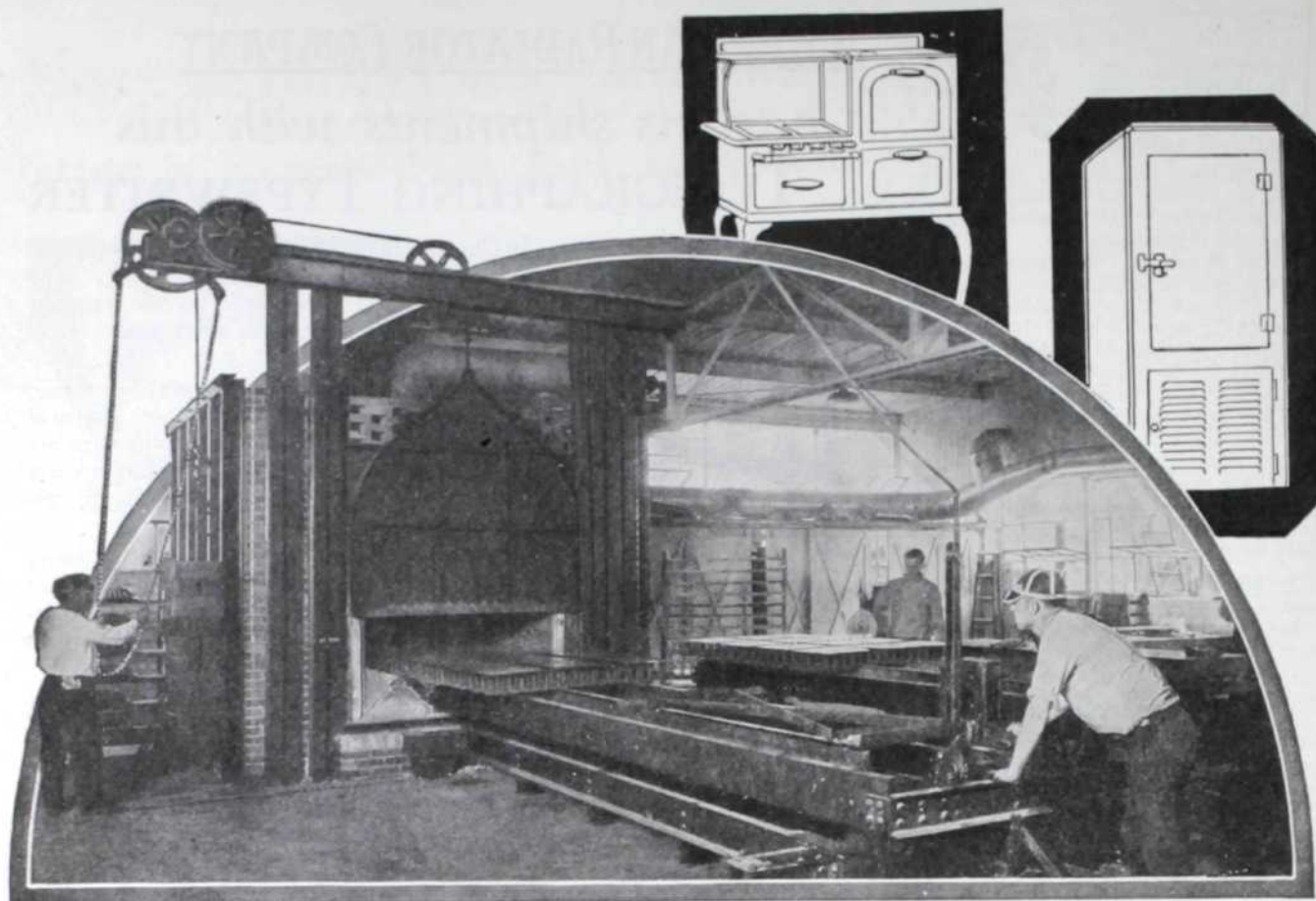
**No. 3 Outfit**—With complete Equipment, including Black Enameled Container, 24 Stencils, Ink, Stylus Pen, etc. (F. O. B. factory—weight 3 lbs.) . . . \$15

**No. 6 Outfit**—Consisting of all three sizes, with supplies, packed in handsome Steel Baked Enamel Finish Case. The most complete office printing plant known. (F. O. B. factory—weight 20 lbs.) . . . \$50

### THE MULTISTAMP CO., Inc.

Norfolk, Va., U. S. A. — Agents and dealers in principal cities





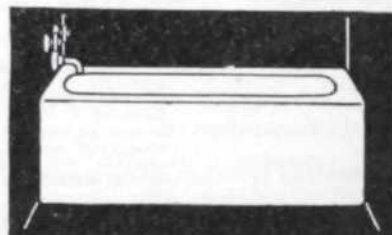
## In the Production of Enamel Ware, Too, Alundum is a Factor

The tremendous increase in the production of porcelain enamel products is apparent everywhere—stoves, heaters, baths, refrigerators, furniture. In the manufacture of these modernized sanitary requirements the electric furnace product trademarked "Alundum" has an important part. In the form of muffles, it is a refractory that makes possible successful baking of vitreous enamel ware to meet present day demands.

The high heat conductivity, long life and stability at extreme temperatures of "Alundum" muffles has provided means for improvement in enameling furnaces—keeping them in pace with the fast increasing use of enameled products.

Thus "Alundum"—the basic material in grinding wheels, polishing grain, non-slip floor and stair tiles, and laboratory ware—has entered another industry.

NORTON COMPANY, WORCESTER, MASSACHUSETTS



# NORTON

Grinding Wheels  
Grinding Machines



Refractories-Floor  
and Stair Tiles



# When Good Merchants Get Together

By FRANKLIN S. CLARK

**T**HE independent retailer is finding that he can make an ally of his brother independent in some respects; that they can exchange experiences, get together for friendly discussions of mutual problems, and profit by it; that they can also act together in some things to good advantage.

Two years ago quite a bit was heard



of a comparatively new expression in merchandising, new in common usage at least, group-buying. Some New York garment manufacturers had joined together in a declaration that they would not permit in their salesrooms the representatives of group-buying organizations of department stores. They had no very concise objections to make. Their action seemed to be mostly grounded in distrust of a new practice. That was all it amounted to, the making of the declaration. It was never enforced. Group-buying by department stores has come to take on the complexion of a well-established practice and is now accepted as a matter of course by all concerned.

Retailers in other kinds of merchandising are showing a similar tendency to get together, for group-buying and for other purposes also. Already there is hardly a city of any size that hasn't its "I. G. A.," Independent Grocers' Association, as it is often called, which can sign on the dotted line for carload lots or the entire output of a small producer as logically as the chain. It may own or lease a warehouse. Often it matches the chain grocer's newspaper advertisements, space for space, with a collective advertisement.

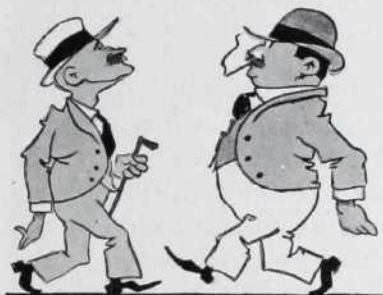
## A Big Bunch of Little Fellows

**A**HUNDRED of the leading independent druggists in Kansas City buy and advertise collectively. Another organization of independent retail druggists has more than a thousand members in fifteen states and owns warehouses in ten important cities. There is an organization in New York that has been buying for a group of stores which sell articles in the five cents to one dollar field for fourteen years. And it is now doing just about the same amount of business that

the Woolworth stores did fourteen years after they were established.

The chain store has been crowding the independent grocer of late years harder than it has most retailers. It is estimated that 30 per cent of the country's groceries are now distributed through chains, and, in some of the larger cities, 65 per cent. And the chains have offered the independent grocer no quarter. That is, the method of chain expansion has not, as it has in some other fields, permitted the independent the alternative of stocking a certain line, becoming a factory dealer, or part of a semi-chain. It has usually moved in right beside the independent grocer, with its smart window displays, its cut prices and special offers, and its newspaper advertising.

The independent grocer sometimes has been able to offset the methods of the chain with his telephone and delivery and credit service, and through ability to stock his shelves to suit more varied and discerning tastes than the chain. But how well these tactics of defense have served him has depended largely



upon what class of patronage he has had. If he has drawn his trade from that vast majority of citizens who must count their pennies, the chain has usually been able to wean a good number of his customers away from him, do what he will.

It was just about this situation that a great many of the independent grocers recently faced in a city of 75,000 population in northern New York State. In this city of 75,000 population a few years ago were to be found no less than 300 grocers, on an average of one for every 250 potential customers. One grocer for 400 population is the average for the country over. But the city's oversupply of grocers did not deter the chains. One national and another regional chain came in and, between them, opened 50 more groceries. Rough sledding was made rougher, that was all, for the independent. The chains sold private-brand flour for less than he could buy it wholesale. A half-dozen other staples were in the same category, and in general the independent could not

begin to meet chain prices. Furthermore, by means of their newspaper advertisements the chains flaunted their bargains before the very eyes of the independent's customers. Although there were only about 50 of them, the chains were absorbing nearly a third of the business.

These were the conditions that prevailed in the spring of 1926. Conditions did not appear to be overpromising for any effective joint action of the independents. Hard sledding, instead of bringing them into a bond of sympathy, had screwed up nerves to the snapping point—had fanned smoldering antagonisms into flame. Two independents with stores across the street from each other would not exchange greetings when they encountered each other. Another pair of veritable fighting cocks among the independents were actually brothers but would not admit it.

## Organized to Advertise

**B**UT THE advertising manager of the local paper saw an opportunity for selling some space and doing the community a good turn at the same time. He managed to get a handful of the leading grocers together for a conference. They decided to see what could be done. Each one of them agreed to go out and get ten other grocers to attend another meeting.

This was no easy undertaking. The idea that a rival was to be regarded in any light but as an enemy was new to most of the independents. But by hook or crook they got their men. The encroaching chains provided them with an argument ready-made, and one that had already been brought home to them. The count at the second meeting showed an attendance of 250, including grocers and others directly or indirectly interested. Among the speakers was the secretary of the Chamber of Commerce, the cashier

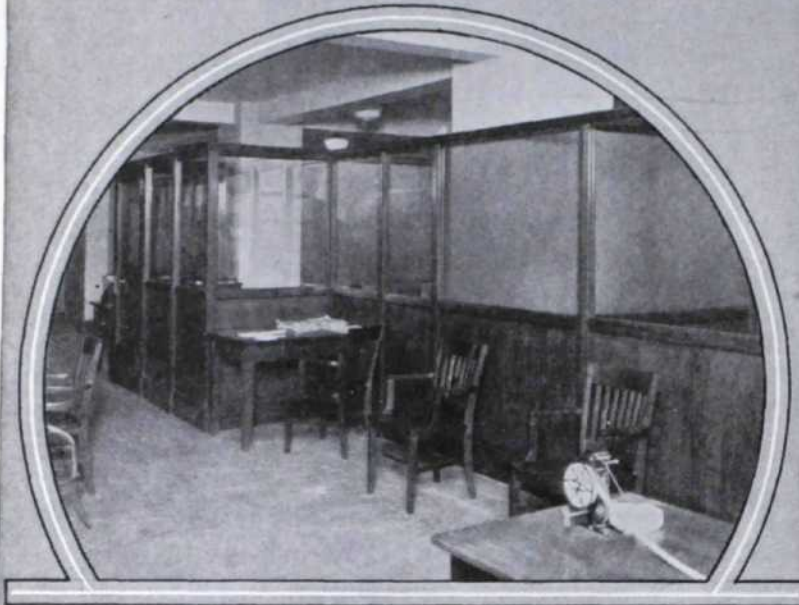


of a bank, and the president of the Business Men's Association.

As a result of the meeting about 100 of the grocers who attended formed an association, with the immediate object of getting better acquainted with each other. And in the words of the secre-



# BEAUTIFULLY FASHIONED



*Type T partition in a nationally  
known broker's office*

**H**AUSERMAN Movable Steel Partitions, in addition to their unequaled utility value, impart to business surroundings an atmosphere of dignity and warm livable beauty.

This is not alone the result of the rich beauty of finish but also the artistry represented in their design and fashioning.

In eleven types and grades and many color combinations they are suitable for every kind of business, from finest executive office to modest commercial purposes. For the past eleven years they have been meeting the needs of leading organizations—nation-wide.

Let us tell you today about this attractive cost-saving way of dividing commercial and industrial space.

## THE E. F. HAUSERMAN COMPANY

*Largest Steel Partition Manufacturer*

6817 Grant Avenue Cleveland, Ohio

*Sales, Engineering and Erection Service at Branches  
in Twelve Principal Cities*

"ORGANIZED FOR SERVICE NATIONALLY"

**HAUSERMAN**  
MOVABLE STEEL  
**PARTITIONS**

tary, "Our first step was to get as many of the grocers together as we could, and, where they were not acquainted, to make them so. If they had any grievances we tried to find out why, and in most cases we could demonstrate that they were imaginary." As a starter the association tried the experiment of or-



dering 1,000 pounds of coffee. No difficulties developed. Substantial savings resulted for the members who participated. The association staged an outing and picnic that was attended by 5,000, including the grocers themselves, their families, friends and customers.

A carload of flour was the next collective purchase. But, although it was secured at an attractive figure that enabled the members to meet chain prices, the public had not been informed of it, and it moved only normally. The time was ripe, it was decided, to go in for advertising. Thirty-four of the members of the association signed a contract for seven full columns of space weekly in the local newspaper, for a year. The advertising registered at once. The next order for flour was for five carloads, and, featured as a special in the association's advertising, the members got rid of it as quickly as they had been able to dispose of the one carload without the help of advertising.

The association now plans ahead for its buying, just as it does for its newspaper advertising, where it is to its advantage to do so. For example, it recently made a very favorable contract with a packer for six carloads of canned goods for future delivery. It has more or less permanent arrangements with a milk distributor and a dairy, which provide its members milk and butter, of certain quality, and at a saving compared to what they had to pay formerly.

### Profits Are Coming In

**I**N THE year or more that the organization has been functioning the members have enjoyed an average increase in business of 25 per cent. And, in the words of a member, "Profits are up because inventories have been reduced and lower wholesale prices made possible."

"The chain is here to stay," these grocers concede. But so little does one of their members fear the chain that he has built a new block next to his own store and rented space in it to one of the chains. With the advantages of collective buying and advertising, and the ability to extend to their patrons the conveniences of credit and a delivery service, which is something the chains:





## A MOTOR SERVICE *THAT* SAVED A MARKET

It is the exceptional motor manufacturer who carries his service beyond the mere design and production of a motor according to specifications—who analyzes the application and builds his product to fit the exact conditions under which it must operate.

Domestic Electric engineers regard the motor, the market, and the design and production of the appliance as three phases of a single problem. They develop and recommend in every case the one motor that will best serve the appliance for which it is designed, under the actual working conditions for which it is intended.

The Domestic Electric Company, in its long experience as a manufacturer of

special motors exclusively, has developed nearly every imaginable combination of electrical and mechanical features in the fractional horsepower field—for scores of commercial, household and industrial uses.

This experience, together with Domestic's highly specialized production facilities—is always at the disposal of manufacturers who are introducing new electrical appliances, or turning old applications to new uses, or seeking to overcome service troubles and cut production costs.

We invite you to visit the Domestic factory—to see how the Domestic organization can operate to your advantage, as a department of your business.

An industrial equipment manufacturer extended the use of one Domestic motor to five different appliances of the same general type—but soon began to receive persistent reports of service troubles.

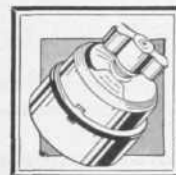
Domestic Electric engineers, called in consultation, personally followed every complaint back to the user, and thoroughly investigated the character and causes of the trouble. They found that in every instance the difficulty was with only one of the five appliances, which was carrying in actual service a somewhat heavier load than it was designed to stand.

A slight modification of the motor for this one appliance immediately corrected the trouble—saved a large and profitable market—without the necessity of any change in the other four appliances.

THE DOMESTIC ELECTRIC COMPANY  
7209-25 St. Clair Ave. Cleveland, Ohio



(98)



Overload protection for fractional h. p. motors — Domestic Automatic Safety Switch

(99)

INDUSTRY'S • BIGGEST • LITTLE • THING

When writing to THE DOMESTIC ELECTRIC COMPANY please mention Nation's Business



# Insuring packages is more convenient



**N**ORTH AMERICA Parcel Post Insurance solves the problem of how to insure packages conveniently and economically. Coupons from a North America Coupon Book insure automatically and promise prompt adjustment in the event of claim.

Ask any North America Agent about this dependable and efficient insurance—or send the attached coupon for full information.

## the North America way

"The Oldest American  
Fire and Marine  
Insurance Company"  
Founded 1792

Insurance Company of North America  
Sixteenth Street at the Parkway  
Philadelphia, Pa., Dept. N-2

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Wants information on Parcel Post Insurance

cannot do, the association members are now, generally speaking, either holding their own with the chains or in some cases outdoing them.

This organization is typical of similar organizations which may be found in such representative cities as Spokane, Minneapolis, New Orleans, Schenectady—in fact, in dozens of cities throughout the land. Some of them have been established and in successful operation much longer than this one. Then there are many organizations of grocers created for similar purposes but formed on a somewhat different pattern. It very often happens that the wholesaler or jobber, instead of the grocers themselves, is the one who initiates action. For the chains, by dealing directly with the producer, thus cutting him out altogether, have hurt the wholesaler even more seriously than they have the independent retailer. As a counter move some wholesalers have helped groups of retail grocers to organize and to advertise collectively, reaping their pay by acting as buying agent for them. One wholesaler serves no less than 500 independently owned stores in this manner. And oddly enough, along with his 500 independently owned stores, he has 800 stores which he owns and operates as a chain, and, furthermore, does a consid-



erable business with unorganized independent retailers. In some instances a group of wholesalers has combined to advantage with groups of retail grocers.

Some of these organizations of independent grocers go in for both collective buying and advertising; some of them merely for collective buying, or merely for collective advertising, though collective advertising implies, of course, the necessity of stocking similar goods. Where collective advertising—and not buying—is made the basis of organization, it is usually done in conjunction with a wholesale house, or with a group of them. The wholesaler supplies one or more items which can be featured at a low price and then other articles are offered at the usual price or thereabouts. It is to the advantage of the retailers, of course, to stock the advertised goods. But they have a free hand in stocking any other items that they desire to.

Some of the "independent chains" of grocers, as they are sometimes called, go so far as to paint their store fronts uniformly, after the common manner of the chains. In other cases they simply paint an adopted monogram over or above their own name. There are associations



The  
Atlanta Biltmore  
Atlanta

The South's Supreme Hotel

A Bowman Biltmore Institution  
"Where Southern Hospitality Flowers"

Guests' Comforts above all else

Rates from

\$3.50

Golf for Biltmore Guests

Geo. McEntee Bowman, Pres.  
H. B. Jenkins, Manager

Wm. Candler, Vice-Pres.  
W. C. Royer, Asst.-Mgr.

## "Organizing Communities For Forest Fire Control"

has just been published by the Natural Resources Production Department of the U. S. Chamber of Commerce.

This 36-page pamphlet discusses in detail the forest fire problem, the loss and damage, and method of controlling forest fires.

It is now available for 25 cents a copy.

NATURAL RESOURCES  
PRODUCTION DEPARTMENT  
U. S. CHAMBER OF COMMERCE  
WASHINGTON, D. C.



in which some of the members operate on a cash-and-carry basis, joining with the other members only in buying operations. It is quite apparent that in mixed groups of this sort joint advertising would not be feasible because of the difference in the cost of doing business and the resulting difference in prices.

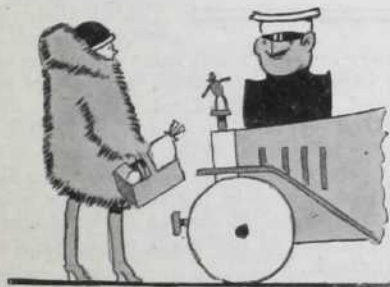
As a general thing, the group of independents does not attempt to compete with the chains purely on a price basis. But it offers credit and delivery service at almost chain prices. The independents can generally meet chain prices in any particular item, or perhaps beat them, if the chains seem to be rubbing it in too much, so to speak. A comparison of chain and group advertisements usually reveals a number of articles priced identically. But for the most part, where the group advertises an article for, say, 18 or 19 cents delivered, the chain offers it for 17 or 18 cents cash and carry.

### Independents Stand on Service

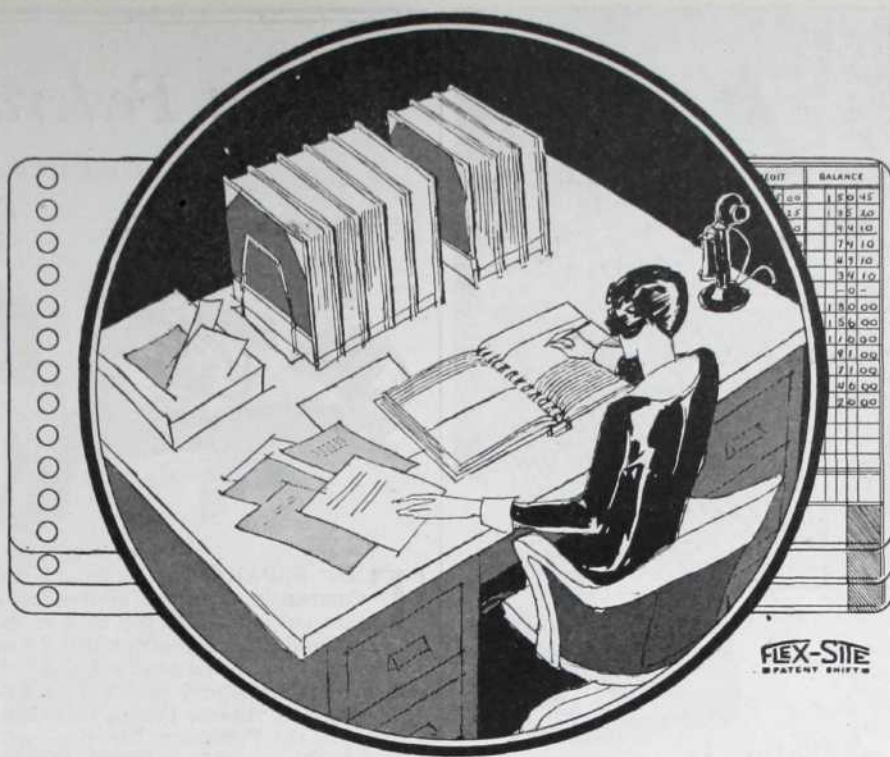
A GROUP of independents could not be expected to function with quite the machinelike perfection of a chain organization. But the joining up of independents has gone far enough to demonstrate that it is a workable scheme and produces worthwhile results. Just as the chain seems to be firmly entrenched because of efficiency of a certain kind, there will probably, on the other hand, always be the independent able to stand sturdily by himself. For when it comes to supplying the demands of customers who want the very best or the unusual, in merchandise and service, and are willing to pay for it, the independent doesn't have to take his hat off either to the group or the chain.

Some independent druggists have successfully met chain competition by moving from a business district location to a residential district and specializing in prescriptions. More than one grocer has found his salvation by putting in an attractive delicatessen department or meat and vegetable market with especial reference to the tastes of his own clientele.

And it often works out this way—he



may not do as much business as the chain, but nevertheless he may make just as much money. The folks who are not too proud to drive up in their limousines to fill the market basket with standard products from the chain will often give him just as much profit in the purchase of a single nickname that the chain doesn't carry.



## Have you seen the latest development in visible records?

Don't take it on hearsay — *See it work.* Actual demonstration beats any amount of "selling talk".

Let us put a Brooks Visualizer on your desk. Open it yourself, notice that every single record sheet is visible — that any one can be found instantly. Observe that with the "Automatic Shift" (an integral part of the unit) you can *create space* for a new sheet between any two others, or take one out and *close up the space*, without removing any others from the prongs.

Observe also that many of the best known business concerns in the country, after one to six years of successful use, say their accounts receivable, stock, sales and other records are handled better and with a definite saving in time and money.

Our representative can demonstrate in fifteen minutes in your own office at your convenience. Let us make an appointment.

### THE BROOKS COMPANY

Offices in 67 Cities

1235 Superior Ave. - - - Cleveland, Ohio

Distributors for Canada:

Copeland-Chatterton, Limited, Toronto.

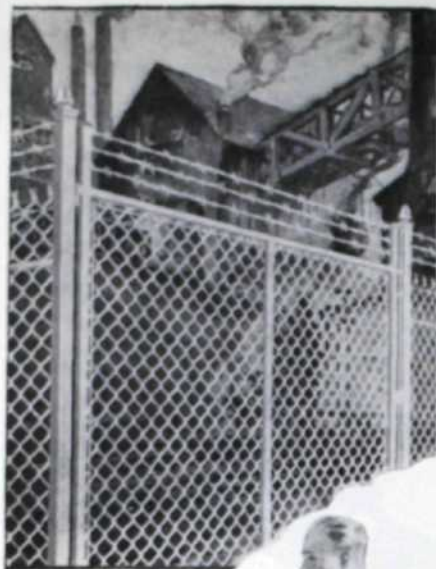
# ✓ BROOKS VISUALIZERS

WITH AUTOMATIC SHIFT

Copyright 1928, The Brooks Co., Cleveland

When writing to THE BROOKS COMPANY please mention Nation's Business





## At your Finger Tips Anchor Fencing Service



In principal cities—from coast to coast—over 75 Anchor Service Stations are "on the mark"—ready to meet your fencing requirements.

This nation-wide organization of trained fencing specialists insures personal, "on-the-job" attention to every fencing detail, from the taking of preliminary measurements to final erecting operations.

Anchor Fencing Service means convenience—satisfaction—economy.

A phone call, letter or wire to any Anchor District Service Station will immediately bring you our local representative or catalog—as desired.

**ANCHOR POST FENCE CO.**  
Eastern Ave. & 35th St. Baltimore, Md.

Albany; Boston; Charlotte; Chicago; Cincinnati; Cleveland; Detroit; Hartford; Houston; Indianapolis; Los Angeles; Minneapolis; L. I.; Newark; New York; Philadelphia; Pittsburgh; St. Louis; San Francisco; Shreveport.

# ANCHOR Fences

*Buy the fence with*  
1. THE STRONGEST POSTS  
2. THE STRONGEST GATES

A NATION-WIDE FENCING SERVICE

When writing please mention Nation's Business

## Recent Federal Trade Cases

By LEO A. BORAH



**T**HE SEPARATED Standard Oil Companies have now in the aggregate only about 25 per cent of the crude oil production and about 45 per cent of the output of refined products, the Federal Trade Commission reveals in a 300-page report on "Prices, Profits, and Competition in the Petroleum Industry" submitted to Congress December 12. Twenty years ago these companies had about 80 per cent of refined products. The growth of independent companies has been remarkable particularly in the last few years.

The Commission finds in its investigation of the petroleum industry no evidence of agreements or manipulations of any size among large oil companies to raise or depress prices of crude petroleum, but notes a growing sentiment for regulating production to conserve the supply and protect the financial interests of land owners and operating companies.

The report is in response to Senate Resolution No. 31, adopted in June, 1926, and addressed primarily to the question whether there is arbitrary control of prices of petroleum and its products through agreements among companies or through conditions of ownership or control of oil properties.

Supply and demand, the inquiry shows, have controlled prices over the longer periods. Short times of fluctuation have been due to decisions of a few large purchasing companies among which there is generally little competition. The wide spread which frequently exists between tank-car and tank-wagon prices is the cause of a great deal of the so-called "price cutting" that occurs at times in many parts of the country.

Although 179 directors hold 458 directorships in companies covering 70 per cent of the industry, only four instances were reported of interlocking directorates which

would have an appreciable tendency to unify the control of any considerable part of the industry.

The report shows that competitive activity in the industry has increased in recent years but has not prevented an increasing rate of profit in all branches. For 1923, 1924, 1925, and the first half of 1926, the rate of profit on investment, based on the companies' own figures, ranged from an average of 2.5 per cent in 1923, a year of depression in the industry, to 14.7 in the

first half of 1926 for all crude oil companies reporting, and from 5.1 per cent to 11.3 per cent for the refining companies. Profits of interstate pipe line companies were much higher, exceeding 17 per cent in every year from 1921 to 1926, and averaging 20.3 per cent for the period.

Crude production has grown enormously. In 1906 the Appalachian, the Lima-Indiana, and the Mid-Continent fields each produced about 22,000,000 barrels, and the California field yielded about 33,000,000 barrels of

heavy crude of small value except for fuel. In 1926 about 425,000,000 barrels were produced in the Mid-Continent field, 225,000,000 in California, and 85,000,000 in other fields west of the Mississippi—a total production more than five times that of 1906. Since the beginning of the industry the United States has produced almost 65 per cent of the world supply of crude petroleum.

**COMMISSIONER** William E. Humphrey of Seattle, Washington, succeeded Commissioner C. W. Hunt as chairman of the Federal Trade Commission December 1. He will serve until November 28, 1928.

**WITHOUT** formal action and its resultant publicity, the Commission induced a number of companies to cease al-

**F**EDERAL Trade Commission proceedings and activities for the month are recorded here. Most significant of the items are:

Report of the Commission on its comprehensive investigation of the oil industry summarized.

Important Commission and Congressional inquiries under way.

Unfair competition methods and misleading advertising ended by stipulation in several cases.

New rule of practice in dealing with complaints adopted by the Commission.



leged unlawful practices. Unethical trade names, price maintenance agreements, and other unfair competition methods were dealt with, and the companies were let off on their promise to be good. Detailed information on these cases may be obtained by writing to this department.

Five companies making and selling vulcanized fibre sheets and fibre specialties agreed in "Stipulation 94" to discontinue agreements to maintain uniform basic price lists and cutting charges.

To label shoes not made under government contract and specification "U. S. Army," "National Guard Army," "Garri-son Army," "Trooper Army," "Army Ameri-can," or "Army" is unlawful, and four companies agree in "Stipulations 102-104-105-106" to desist from the practice. These stipulations are in keeping with earlier ones concerning the use of the labels "Munson Army Last," etc.

Upholstery advertised as "silk mohair," must be of genuine silk. A furniture man-ufacturer agreed in "Stipulation 98" to make no further misrepresentations of non-silk upholstery.

Trade names are the subject of close scrutiny by the Commission. In "Stipulations 99-101" a manufacturer and a distributor agree to abandon names falsely implying silk or satin content in materials fabricated of thread not from the silk worm.

A company which advertised a gasket cement as containing shellac which was not present in its composition was induced to omit the word "shellac" ("Stipulation 100").

"Strictly all new material," "blended cotton," "shredded cotton," "cotton puff," and "pure, sanitary materials," are bed-ding advertising phrases which may not be used unless they truthfully describe the materials used in the bedding. A manu-facturer agreed in "Stipulation 103" to desist from misleading statements in his ad-vertising.

A distributing company that neither owns nor controls factories may not use the word "mills" in advertising its prop-erty (Stipulation 97).

**T**HE Commission has ordered inquiries into resale price maintenance, "Blue Sky" securities, price bases, and lumber trade associations. Agents have already been in the field testing out plans for com-prehensive statistical questionnaires on systems by which manufacturers require the retail merchant who sells their prod-ucts to maintain a definite price prescribed by the manufacturer.

In bringing down to date a previous, un-published study of the abuses arising from the fraudulent sale of worthless securities and the best remedies for this evil, the Commission is developing another con-structive economic study.

Considerable research into the origins of factory base and "delivered" prices is be-ing made as a preliminary to a field study.

The work on the inquiry into practices of trade associations, particularly in the lumber industry, in relation to competi-tive conditions has been nearly completed.

Certain recent investments of the Du-Pont Company in the Steel Corporation directed attention to a business condition of considerable public interest, because it affects in principle general corporate or-ganization and policy.

**T**HE Congressional inquiry on stock dividends, completed in November and submitted to the Commission has been ap-



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**INVESTED CAPITAL** operates at a decided advantage in the Middle Georgia Industrial Area—where plant costs are low and efficiency is high. For the established manufacturer this section offers substantial savings. For new industries, it holds unusual opportunities—based upon great natural resources and the fast-growing Southern market.

Already the advantages of Middle Georgia have been recognized. Manufactured products have jumped 30.5 per cent in value within the last three years. Hydro-electric power consumption, 243 per cent!

Climatic conditions favor year 'round production. The supply of intelligent native-born white labor is unlimited. And wage scales reflect the low living costs—15 per cent below the national average.

If you're considering re-location—or a branch plant—send for our new book of facts—just off the press. Address:

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**Industrial Area**

—Where Production Savings Alone  
Will Pay Plant Dividends!

proved and sent to the Senate. The Commission is considering a third and final draft report of the bread inquiry directed by the Senate. The second and last volume of the report on the electric power inquiry is before the Commission. It deals with competitive conditions in the entire power field.

Especially attention from the statistical standpoint is being given the inquiry on open price associations to discover the effect that association activities have on prices. The field work on the investigation of the cotton seed industry has been completed, and the report to Congress is being prepared.

Progress is being made on the congressional inquiry relative to the growth of cooperative associations, including particularly comparative costs of marketing and distribution as between cooperatives and other classes of marketers and distributors; and the extent and importance of interference with and obstruction to the formation and operation of such associations. A series of conferences with important cooperative leaders and organizations has been held.

Through the general cooperation of those interested in cooperative associations, the work of the Legal Investigation Division, which is conducting the investigation, has been greatly facilitated.

**ADVERTISING** as "walnut," furniture in which the exposed parts consist of woods other than walnut has been prohibited in an order of the Commission to an eastern firm.

The firm was also directed to cease false representations that it manufactures furniture, that it sells furniture directly from manufacturer to purchaser, or that its sale price is the wholesale price or is equal only to the cost of manufacturing. (Docket 1150.)

The Commission continued its campaign against unfair competition in the correspondence school business by ordering a school to abandon the practice of advertising its regular tuition charges as "cut rates," or representing that it gives free of charge tools, appliances, books, or other articles, when in fact such articles are regularly included in the price of the course of instruction.

In Docket 1343 a wholesale association and its members were ordered by the Commission to discontinue attempts to lessen competition in their territory by discrimination against non-members of the association. Boycott, espionage, and other intimidations are said to have been practiced by the association against manufacturers and producers who sold to non-members.

Dockets 1448-1449 deal with the practice of a fur company and a school of taxidermy which offered to prospective pupils specially reduced prices advertised as available for only a limited time. The prices were found to be the regular charges for the course.

Dismissal of the case followed the respondents' agreement to abide by rules adopted at a trade practice conference of correspondence schools last April and approved by the Commission in July.

Again misuse of the word "steel" in connection with the manufacture and sale of tools in which steel is not present is the cause of action by the Commission. (Docket 1395.)

In dismissing the complaint against a Pennsylvania company, the Commission

reserves the right "to take such further action as may be appropriate in the public interest in case the respondent shall resume the use of the word 'steel' in connection with the manufacture and sale of the tools referred to in the complaint."

**ADOPTION** of a new rule of practice by the Federal Trade Commission was announced December 20. It provides for (1) insertion in every order to cease and desist issued by the Commission the specific number of days in which the respondent must file a report in writing to show how he has complied with the order, and (2) reopening of cases by the Commission within ninety days after disposition of such cases in instances where the Commission so elects. The first part of the rule has often been applied by the Commission in particular cases but not heretofore generally in all cases, both of which are its rights under the statute, the Commission explains.

**COMMISSIONER** Garland S. Ferguson, Jr., has been designated by the Federal Trade Commission to represent it at a trade practice conference with the cotton yarn mop industry. He will take the place of former Commissioner John F. Nugent, resigned, who was named to attend the conference.

**DISMISSAL** of a complaint against a varnish company was ordered by the Commission upon receipt of an affidavit containing evidence in addition to that already received. Alleged misbranding of paint products was involved. (Docket 1346.)

**UPON** assurances by attorneys for a knitting company that the company had discontinued the practice of labeling goods made partly of wool as "all wool" or "100 per cent wool," the Commission dismissed charges. (Docket 1454.) A large number of similar cases involving false advertising of woollen goods have been settled recently by stipulation, the companies agreeing to cease unethical practices.

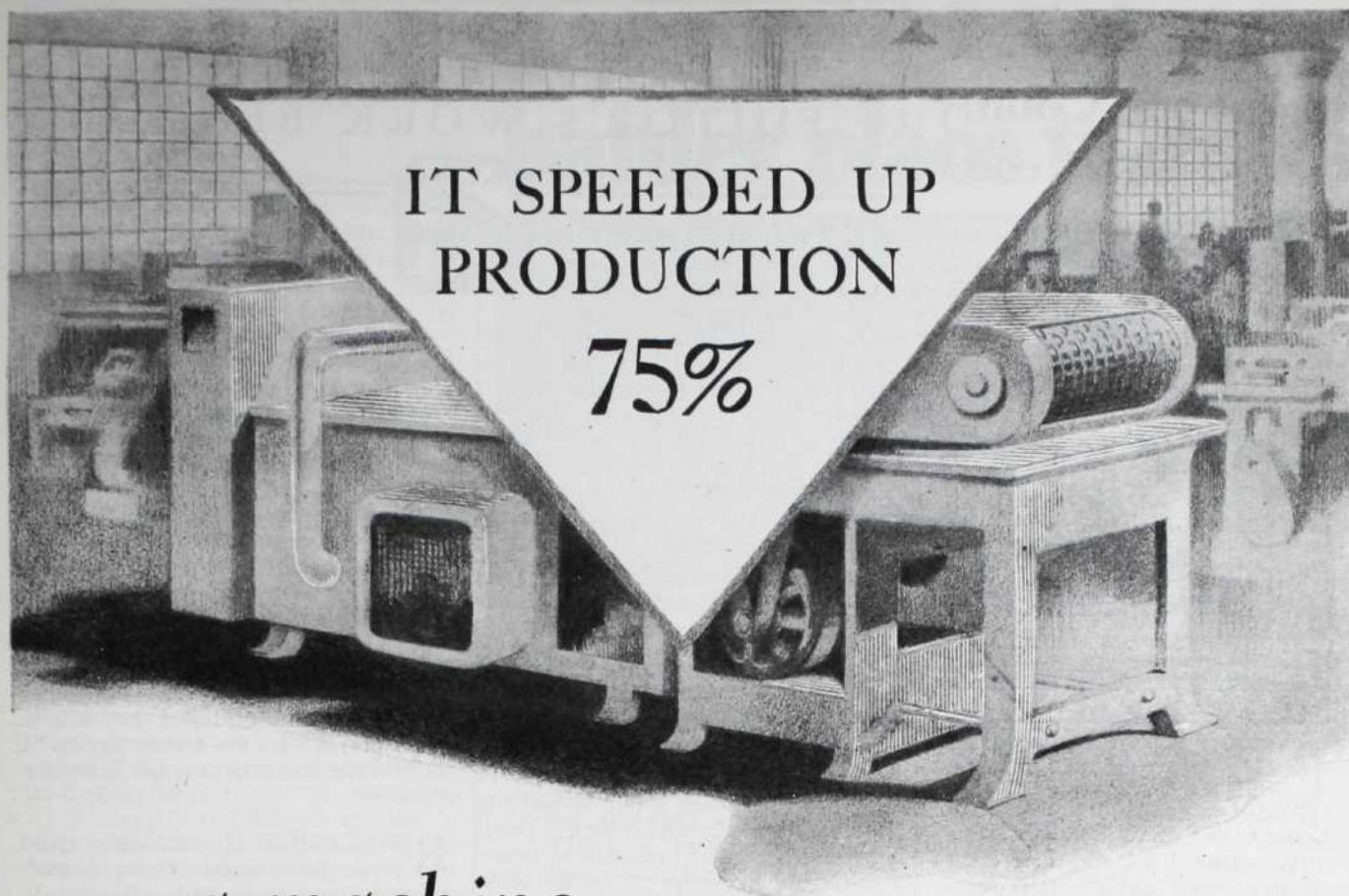
A complaint involving alleged fixing of uniform prices, terms, and discounts by a large group of manufacturers was dismissed "without prejudice" in Docket 1290.

**WHEN** a woman buys an "exclusive model" hat or gown of expensive material and then runs into another woman wearing its replica in cheap materials, tragedy is in the air. Men are not so finicky, but manufacturers of shirting materials insist upon the sanctity of the styles they design.

Members of the industry met in New York December 10 under the auspices of the Federal Trade Commission to consider unfair competition said to exist. Misbranding of materials is one of the unfair practices alleged.

Copies of the Commission's complaints, respondents' answers, and the Commission's orders to "cease and desist," or of dismissal may be obtained from the offices of the Editor of *NATION'S BUSINESS*, Washington, D. C., without charge by reference to the docket number. Transcripts of testimony may be inspected in Washington, or purchased at 25 cents a page from the official reporter, whose name is obtainable from the Commission.—*The Editor*.





IT SPEEDED UP  
PRODUCTION  
75%

## a machine CAN DO IT

*"We put our problem up to you. You designed, developed and built machines that did away with a large amount of hand work, speeded up production 75% and practically eliminated accidents."*

—GILLETTE SAFETY RAZOR COMPANY

**S**PECIAL Production Machines, Inc., whose business is the designing and building of special automatic machinery for quantity production, has successfully served manufacturers in widely diversified production manufacturing fields. Manufacturers have come to us with problems which have long hindered speedy and economical production. In some cases the problem was met by improved and perfected ma-

chinery. In others, an entirely new machine was devised to replace slow and expensive hand labor. Some manufacturers have asked us to help bring their research to a successful conclusion. Due to our specializing in this kind of business we have been able to do so at less cost than they could have done alone. The wide range of problems successfully handled by our staff of mechanical engineers and designers indicates the general usefulness of our service. A booklet describing Special Production Machines, Inc., how it operates and how it is serving manufacturers, will be sent on request. Special Production Machines, Inc., Norfolk Downs, Mass.

# SPECIAL PRODUCTION MACHINES

INCORPORATED

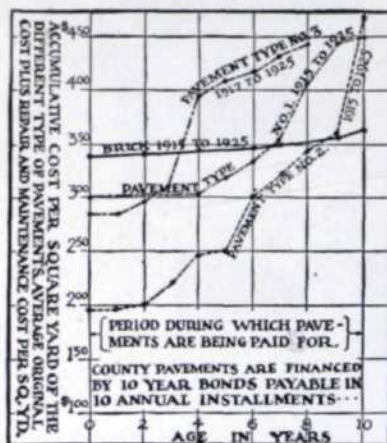
A Division of

PNEUMATIC SCALE CORPORATION, LIMITED

*For over thirty-five years Pneumatic Scale Corporation, Ltd., has manufactured automatic labor-saving machinery for many of the world's largest producers of merchandise.*



## What ten years taught one County about TRUE cost of roads



FOR ten years accurate maintenance costs were kept on four types of pavement in Cuyahoga County, Ohio, which contains the city of Cleveland. Brick and three other commonly used paving materials produced the figures charted above.

Note that brick and one other material (Type 1) kept cost low during the first four years.

Costs of Types 2 and 3 started mounting the second year.

Cost of Type 1, after only four years, also began soaring and with Types 2 and 3, mounted steadily for the remaining six years.

The average original cost of pavements plus the maintaining costs for a ten year period was as follows:

Brick	• • • • •	\$3.60 per sq. yd.
Type No. 1	• • • • •	\$4.50 per sq. yd.
Type No. 2	• • • • •	\$4.60 per sq. yd.
Type No. 3. (8 years only)	• • • • •	\$4.45 per sq. yd.

### Why Brick Maintenance Is So Low

These records are typical. Brick produces the toughest wearing surface man makes. Properly laid on any good base, with sand cushion and bound with asphalt, moisture can never enter—to freeze, expand and destroy. And this surface has the "give" to take up shocks and jolts without cracking up.

So brick's levelness, non-skid properties and freedom from reflected light glare may be had today at lowest cost of any paving material.

Complete records of cost sent upon request. Address:

**National Paving Brick Manufacturers' Association**  
332 South Michigan Avenue, Chicago

## CHIPS FROM THE EDITOR'S WORK BENCH



WITH all the talk of budgeting and business methods for the home, it did seem desirable for proper accounting that the head of the family should be determined once and for all. But the definition made by the Internal Revenue Bureau also has the practical quality of helping to resolve the many many-headed families into some sort of conformation with a definite standard. The head of a family, according to the Bureau's reasoning, is—

an individual who actually supports and maintains in one household one or more individuals who are closely connected with him by blood relationship, relationship by marriage or by adoption, and whose right to exercise family control and provide for these dependent individuals is based upon some moral or legal obligation.

Dependable as that definition may be for the Bureau, each family is likely to put its own interpretation on it. For it is plain enough that pants are no longer a distinguishing badge of family office. Modern sports and "the new freedom" have put bloomers and knickers on wives and daughters. And as for riding, there is plenty of evidence that the skirt is more honored in the breach than in the observance. If men are to "exercise family control," to use the Bureau's words, it will not be by trousers alone.

WHETHER it is that more people are smoking cigarettes, or whether the confirmed smokers are harder at it, the world's consumption of cigarettes is increasing year by year. By the reckoning of the Department of Commerce, the average annual gain from 1920 through 1926 was at the rate of 12 per cent.

On the basis of the returns for 1925, the latest year for which comparable figures are at hand, the United States stands first in total consumption with 73,627,037,000, and also rates the top position in per capita consumption with 638. Austria is second in per capita consumption with 636, and Germany is second in total consumption with 30,528,685,000.

For the man who always rolls his own, it is likely that the figures will hold only an academic interest. More to the use of the individual economist would be statistics showing just how many really buy their own.

WATER, water, everywhere, as the old rhyme said, and more and more of it being put to work, the Geological Survey reports. From an output of 23,000,000 horsepower in 1920, the world total had advanced to 33,000,000 at the end of 1926, an increase of 43 per cent in

six years. About three-fourths of the gain in the last three years has been contributed by the United States and Canada.

In the size of constructed hydro-electric plants or in the rate of development, only Canada approaches the United States. Italy and Switzerland are still making considerable progress in building new plants, and Sweden and Norway have a slow steady growth. France and Germany are depending more on steam plants. No recent figures for Japan are available, the Survey explains, but it assumes that plants already undertaken are to be completed.

Along with their statistical usefulness, these ratings of developed water power promise a corrective service. They offer a new standard of liquid measure to those people who are always saying "a lot of water has gone over the dam since then."

RELAXATION of automobile speed limits and a general increase of horsepower ratings were well calculated to cause an upward revision of the rates for public liability insurance on passenger cars. Yet, the justification for an advance of about 16 per cent for the whole country is made more convincing by the underwriters with their itemized presentation of "experience information." By reason of new conditions which have developed in the use of automobile transport, the underwriters take the position that a rise in rates was mandatory. The case for the insurance companies is made by Albert W. Whitney, acting general manager of the National Bureau of Casualty and Surety Underwriters, with saying that:

Automobiles are more powerful and capable of being operated at greater speed; the total mileage of improved highways has improved steadily, resulting in greater average use of automobiles; there has been increasing frequency of claims; there is a growing tendency on the part of injured persons to demand larger amounts as damages; there has been a very marked tendency on the part of juries to award larger amounts of damages.

Whatever may be said for higher speeds in expediting traffic, the action of the underwriters is a timely appraisal of the risks involved.

FAMILY-record Bibles do not stand out among the losses charged to the Mississippi floods, yet a replacement demand for thousands of them is reported by the American Bible Society. While dates and events are still in memory they may be transferred to new pages. Because of the destitute condition of many families, the distribution will be made



without financial return to the Society. Whether or not the demand is regarded as a by-product of the great inundation, it is easy to believe that a practical Christianity properly associates Bibles with flood relief.

**G**RACE and good-will were in a Richmond bank's salute of welcome to the American Chemical Society. By advertisement as "Magicians of Modern Industry" the chemists were deservedly hailed when they met in Virginia's capital, and the First and Merchants Bank was at no loss to itemize mankind's debt to them. Generous as the intent must have been, it is a question whether the chemist gets his full due for his conversion of common salt into soda ash, which "figures alike in the panes of our bathroom windows and the soap that lurks at the bottom of the tub." Soap can be like that, of course, but it can also rise to a higher plane of usefulness. It is because of modern chemistry that "It Floats."

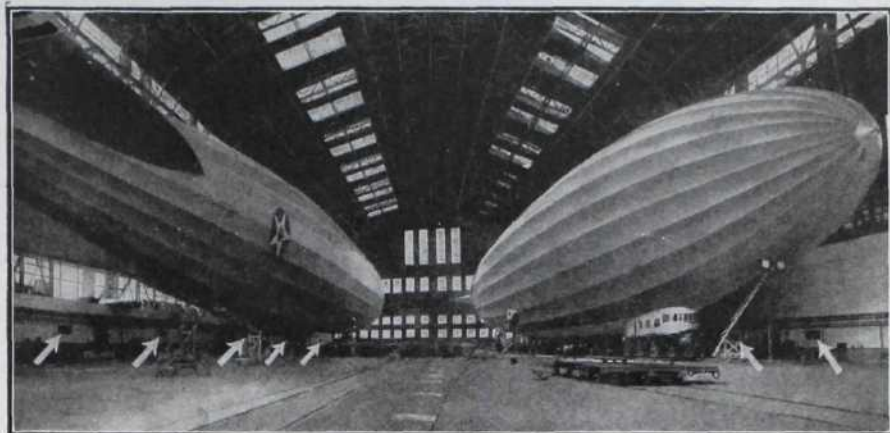
**R**ARE and fortunate is the merchant who does not know the temperamental shopper—the kind of customer who buys only to return his goods. Trial purchases of this sort amount to \$37,000,000 in Chicago alone, to give the estimate of D. F. Kelly of the Fair Store. And, of course, it is the other customers who ultimately pay for these negative transactions. Along with the cost of carting the merchandise to and from the homes of people who buy with mental reservations, there is the item of loss in the deterioration of the goods unprofitably transported and examined. For State Street stores, Mr. Kelly figures, the practice of returning merchandise adds from \$9,000,000 to \$12,000,000 to the cost of goods sold and kept. Certainly there are times when the use of the return privilege is justified, but to accept it as a moral support for a vacillating tendency of mind only invites abuse of the courtesy and puts a needless tax on all who buy.

**A**LONG with our other attainments in mass production, we are now credited with volume output of talk. A count by investigators of the National Industrial Conference Board, New York, allots 202 telephone conversations, during 1926, to every man, woman and child in the country. But the Board takes care to point out that "babes, backwoodsmen and others not located in Wall Street or Greenwich Village never use the telephone at all," a qualification that raises the number of conversations of those who do telephone above the per capita allowance for the whole country.

In its study of the growth of our means of communication, the Board also found that population, from 1900 to 1926, has increased 56 per cent, freight traffic 216 per cent, passenger traffic 123 per cent, mail communications 300 per cent, telegraph messages 153 per cent, and telephone communications 804 per cent.

Using the telephone as a standard of measurement, the Board's evidence is

# Can you think of a harder place to heat?



Hangar at the Lakehurst, (N J) Naval Air Station, the largest single enclosed space in the world—962 feet long, 348 feet wide, 200 feet high—57,120,000 cubic feet

There is room in this great hangar to house two giant airships the size of the Los Angeles, and still have room for several smaller ships. Think of the volume of air in such a building! Yet the task of providing an effective heating system for this mammoth enclosure did not prove difficult for Skinner Engineers.

Ever since Henry Baetz, now Chief Engineer, originated the unit method of industrial heating, over a third of a century ago, Skinner Engineers have been adapting that method successfully to all types of buildings. The design of the heating system for this famous hangar was just one of the thousands of experiences that have prepared Skinner Engineers better than anyone else to give you

## True "Work-Area" Heating at Less Cost for Installation and Operation

"Work-Area" Heating is: heat delivered where your producers are working, not wasted up at the roof. True "work-area" heating is achieved by the use of the

Skinner (Baetz Patent) Air Heater. A special multivane fan, housed in the Air Heater, spreads a blanket of warmed air over the room. At the same time, air from the floor level is drawn into the heater and passed thru nested steam coils. As the air drawn from the floor level must be replaced, the heated layer is pulled right down into the "work-area". This gives

## Perfect Uniformity of warmth over the entire room



— every worker is comfortable, production is high.

Isn't it easy to see the saving made possible by this combination? The heating knowledge of Skinner

Engineers assures you of a saving on installation costs. The effectiveness of the Skinner Air Heater saves you money on fuel.

# Skinner Brothers Engineered Heating

1450-90 S. Vandeventer, St. Louis, Mo. New York Office: 1710 Flatiron Bldg.

Factories at St. Louis, and Elizabeth, N. J. See phone book for branches in:

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Kansas City

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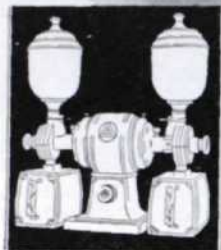
Philadelphia  
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Originators of the Unit Method of "Work-Area" Heating

When writing to SKINNER BROTHERS please mention Nation's Business



# Wagner Motors



## MOTORS for Food Choppers *Clean and Dependable*

Any machine that handles food must be kept clean, so must the motor that drives it. Wagner Motor Bearings will not allow oil leakage or overflow of oil. They are easily kept clean and require little attention for the filtered-oil system of lubrication insures an abundance of clean oil on the bearings.

Then, too, these motors are quiet and are built to close tolerances which means long life.

When a manufacturer uses a Wagner Motor as part of his product, he has the backing of Wagner National Motor Service to assure him of the satisfaction of his customers. Wagner has 24 service stations...factory branches...from which repair parts are distributed to Wagner Dealers located all over the United States.

Literature upon request



### MOTORS

Single-phase, Polyphase and Fynn-Wechsel Motors  
TRANSFORMERS... Power and Distribution  
FANS... Desk, Wall and Ceiling types

WAGNER ELECTRIC CORPORATION  
6400 Plymouth Ave., St. Louis, U.S.A.

44-1201-7

that the United States has out-talked the rest of the world by a wide margin. During 1925, the latest year for which comparable figures are at hand, the first ten countries ranked by per capita conversations were: The United States, 196; Denmark, 135; Norway, 107; Sweden, 106; Austria, 55; Netherlands, 54; Australia, 50; Switzerland, 39; Germany and Japan tied with 33; and Great Britain and North Ireland, 25.

The traffic in words in our own country suggests revision of a common belief that any new invention invariably displaces or makes obsolete earlier devices or methods. The significance of the Board's figures is in the increase of all communications at a rate faster than the growth of population. The telephone has displaced neither the mail nor the telegraph services, nor has the radio checked the growth of newspapers. Quite the reverse, the activity of one means of communication is stimulated by another.

As the Conference Board sees this situation, "The radio, directly and indirectly, has stimulated newspaper reading and other means of communication; telephone conversations are confirmed by mail, thus directly adding to the exchange of mail, besides the greater indirect effect of stimulating and intensifying the pace of business and general intercourse and transactions; likewise telegraph messages both stimulate telephone and mail communications, and in turn are the sequels of such communications."

While the figures do measure the faster tempo of our times and suggest the eager ferment of the age, they are no less indicative of the interrelation of individual interests and the interdependence of economic units.

**B**RIGHT tales of fortunes made in the west are numerous enough to give Greeley's famous admonition the dignity of a proverb. Yet there is an essence of amazement in the fact that two ranch-trained westerners could come to a metropolis "broke," and in a few years make millions in real estate.

Three years ago their cattle ranch in South Dakota was operating at a loss of a million dollars. Deflation after the war let them down hard. Their bookkeeper, they said, "was using three bottles of red ink to one of blue." They decided to turn tenderfoot and make their play in Chicago. Now, they own four downtown buildings—the smallest, 16 stories in height, and the largest, 42 stories. Their ledger shows only a prosperous indigo, several times that million "in the red." Another golden revision of this sort almost would give reason to suspect the existence of a western Greeley with a window to the east.

**I**N A country that makes mechanization of industry the rule, it is not strange that the oil business should turn to machines for help with its chores. More of the quality of news is in the report that manual labor is being eliminated at a faster rate than the horse.

Latest to be displaced by machinery are the ditch diggers. The flesh is willing, but the word is that the machines for excavating pipe lines do the job better.

Because he is able to outdo the motor truck in getting through deep mud, the horse is holding his place. For it is the truck, and not the horse, that is more likely to bog down during the wet season. When "flivvers" were balked by the mire, derrick men and riggers got to work on ponies. This American zeal to keep things moving in the face of obstacles has a measure of advertisement in the proud promise of the circus that "exhibits rain or shine." But more to the public interest than the justifiable self-praise of industry is the readiness of business to adopt and adapt.

**N**OW THAT radio reception is nearer what it should be, the set makers will have more time to consider supplying all of the desirable accessories in the first cost. Perhaps an infant industry is too much concerned with just growing to think of its trimmings. It took the automobile manufacturers a long time to achieve that "completely equipped."

**F**ROM the diligent National Automobile Chamber of Commerce comes the laconic intelligence that of the 2,764,000 trucks in the United States, only 193,000, or 7 per cent, are "for hire." Those figures are illuminating, but they need more details. Does the "for hire" group include the "tramp" taxis that will freight anything from household goods to stage properties?

Guerrillas of the streets, they do no reverence to routes or schedules. All is fish that comes to their meters. They stop at nothing. But, after all, aren't they engaged in a general trucking business?

**F**IGURES disclosed at the national commercial forestry conference show that tree farming is "big business" in this country. Besides the millions of acres of forest reserves, there were in 1927 twenty-one million acres under cultivation by 174 individuals and corporations. It was in recognition of the complicated problems of forestry that the Chamber of Commerce of the United States sponsored the meeting at Chicago, the first of its kind ever held in America. Of the requirements for assuring an adequate forest crop, Lewis E. Pierson, the Chamber's president, told the 200 experts in industrial woodcraft that:

Most important, the tree farmer must not be excessively taxed. If he is paying a tax on the land that is growing a crop that takes fifty years to mature, he cannot succeed. The tax system on forest lands must be changed. The tax should be levied on the yield, not on the land. To pay fifty taxes on one crop is extremely excessive.

For the plain citizen who makes little of "standing timber" or "board feet," there is the expert assurance that not all the primeval forests are gone. Still



enduring are vestiges of those expansive growths the pilgrim fathers saw back of the "rock-bound coast." Still on view are impressive remnants of the wilderness through which Boone pushed westward, and, beyond, the forest lands first mapped through the painful perseverance of Lewis and Clark.

How best to perpetuate our forests is a present and pressing problem to invite the most enlightened interest of government and industry. Solution should be nearer for the knowledge and experience brought to timely focus in the Chicago conference.

**H**APPY the land where live the free and the brave, but happier still because of ice and refrigeration, to record the thought of Frank V. Smith, refrigeration engineer. It was at a meeting of the American Society of Refrigerating Engineers that he said, "In the midst of an unsettled world, the United States alone is a stable nation; we are stable because we are conservative; we are conservative because we are happy, and we are happy because of ice and refrigeration."

Of course that is not the ultimate of happiness, for the ice business and the refrigeration business are still infant industries.

The full measure of their opportunity is in the estimate that "of the 20,000,000 families in America more than 18,000,000 are not ice-conscious." And for suggestion of the unplumbed depths of their market stands the judgment that only 10 per cent of the ice boxes are in use all the year.

Eloquently Mr. Smith points the ice men to the profitable conversion of the uniced. But this new missionary zeal must hold enough heat to keep interest kindled, once the public is made ice-conscious.

**W**HEN one hundred "dude ranches" of Montana and Wyoming organize an association to advertise the wonders of frontier life, it is time for tenderfeet to look to their blisters and their bank accounts.

Not all of the old West is embalmed in the movies, as everyone knows. But it is well for the ranchmen to give notice to the East that the great open spaces are still open for business—"big business," according to the estimated investment of \$5,000,000 in Wyoming's "dude ranches" alone.

So long as spending the vacation signifies the spending of considerable money, communities will find it worth while to compete for a share of the tourist's liquid assets. By the present resort to advertising is measured the profound change from the early West's methods of collection. In the loud and lawless days, visitors learned that "hands up" was the picturesque preliminary to a general shakedown. "Woolly" the West still may be on its ranges, but it is "wild" only on occasion—and then with all modern conveniences.—RAYMOND C. WILLOUGHBY.



## *When Grant Built a Water Works*

In the fall of '63 General Grant's soldiers constructed a water supply system in Chattanooga, Tennessee, as a war-time measure.

Today much of the cast iron pipe laid sixty-four years ago, still in excellent condition, is in use by the City Water Company of Chattanooga, one of our oldest subsidiaries.

In peace as in war, the first need of any community is an abundance of pure water, and almost no property is more enduring than the equipment which supplies it.

*An Industry That Never Shuts Down*

**AMERICAN WATER WORKS AND ELECTRIC COMPANY**  
INCORPORATED





## MR. EXECUTIVE

be a freight elevator man just for a day

**REVIEW** interior traffic conditions in your plant—get a first-hand view of freight elevator door operation. Ascertain what make doors are installed, how efficiently they operate, length of service, maintenance and repair costs, whether they are aids or hazards to production schedules, whether they are fire resistant at low insurance rates, whether they are dangerous to men and freight. One such investigation resulted in **PEELLE Doors**

*Saving \$600.44 a year  
and Reducing cost 36%*

These are direct savings only, savings in elevator time cannot be adequately estimated. Conclusive proof of the efficiency and economy of **PEELLE** counterbalanced, vertical freight door operation where service is heavy and time valuable. Complete data is contained in an A. C. Nielsen certified survey of the Chicago Junction and Terminal Building. We shall gladly send you a copy with a **PEELLE** Catalog upon request.

### THE PEELLE COMPANY

Home Office and Factory: Brooklyn, N. Y.  
Boston - Chicago - Cleveland - Philadelphia  
and 36 other cities

In Canada: Toronto and Hamilton, Ont.

# PEELLE

## Freight Elevator DOORS

["The Doorway of America's  
Freight Elevator Traffic"]

When writing please mention Nation's Business

## What Other Editors Think



B. Franklin, printer and publisher,  
takes a hand at cartooning

**T**HE BUYING profiteer has been the subject of much discussion since Alexander C. Brown opened the subject some months ago with an article in *NATION'S BUSINESS* entitled "Prosperity But No Profits." Saudders Norvell, president of the Remington Arms Co., writing in *Iron Age*, attributes much of the trouble to sales managers more interested in making records than in the results of the methods used to attain these records.

Mr. Norvell tells the story of a manufacturer who, when three producers began cutting prices, told them he didn't want to buy his raw material cheaper. As a manufacturer, he was more interested in a stabilized market. If the price of the raw material was cut and then the price of the manufactured article suffered a similar fate, it would mean a declining market and hence a reduction in buying. It is surprising to see a large manufacturer who, making but a small margin of profit, was not willing to accept a cut price but who recommended that the sellers come to their senses and stabilize prices.

To illustrate the point that price-cutting is often entered into without thought of its ultimate effect, Mr. Norvell cites the case of a large company manufacturing several products which, because of the ruthless tactics of one man, had reduced one of its fields to about four manufacturers. With several lines he was able to absorb the loss in one by his profits in another. Another cut in prices, and one of his rivals came to him to talk matters over. The rival pointed out that as a bankrupt he could give the large concern unenviable competition. Interest on bonds and other obligations could be disregarded. The large manufacturer seemed never to have thought of that side of the question. He naturally wanted competition, but he was surely killing it off.

In summing up the points in his article, Mr. Norvell writes:

"It would seem that we should have a broader vision on the part of those in charge of buying and on the part of those in charge of sales than exists at the present in many cases. All of us in times like these should think very seriously about the general welfare of the industry in which we are engaged. Paradoxical as it may appear, the manufacturer who comes around to the buyer with a cut price is not always the best friend of the buyer. This manufacturer is often the enemy to the welfare of the industry. All of us should get the principle in our minds that it is not always the low price that we receive which is the most advantageous. Low prices frequently lead to the demoralization of an entire in-

dustry. In every phase of industry . . . progress can only be made on those lines of goods where manufacturers, jobbers, and retailers are making a fair and reasonable profit. Progress can never be made when goods are sold at cost or less than cost.

"The salesman who calls on you with a cut price is giving that cut price to your competitor. Often—in fact usually—your competitor will use this cut price to reduce his prices. . . . In many cases wise buyers, when a salesman offers them cut prices today, should ask: 'Why the cut price? Are you giving it to everybody? What will be the net result of this cut price—not to us, but to our industry?' I think some of our selling friends will have difficulty in answering this question."

### Russia Charts Her Economic Course for Fifteen Years

**N**OBODY really knows much about communism in practice. Individualism has been tried thoroughly. Russia may be able to show us some day how communism works. One can't even be sure of whether communism is being tried, for reports of what is going on are so contradictory as to leave one wondering what it is all about. However, in the *New York Times* Stuart Chase told of one of the "most audacious economic experiments in history."

Sixteen men in Moscow today are attempting to plot the industrial course of 146,000,000 people and of one-sixth of the land area of the world. Not for one year alone but for fifteen years. They draw up a definite plan for one year, a less detailed one for five years, and lay down the general outlines of the plan for the next fifteen.

The Gosplan, as it is called, would be impossible without a high degree of economic socialization. Though 90 per cent of the agricultural production is not socialized, the bulk of its distribution is, for there are no agencies for that work except those of the government. It is estimated that 83 per cent of the industrial production is socialized. The government figures that, outside of local barter, 70 per cent of the retail trade is in government hands. Of course, the public utilities are all under the government's control.

Whether the engineering concept of an industrial organization can prevail presents an interesting problem. The Gosplan aims to locate industries near their source of raw material; "to eliminate competitive crosshauling, advertising, salesmanship; to encourage by grants of new



# ..It cost ...\$2975 less to use the right paper in the right place

AN EXECUTIVE of a big oil corporation had decided that one grade of paper should be used for *all* the company's office forms.

The executive meant well. He finished putting his O. K. on a batch of paper orders one morning and sent for the Purchasing Agent. . . . "See here," said he, "why do we use so many kinds of paper for our forms? Wouldn't it be more efficient to have one grade right through? Here—this is a good-looking sheet . . . feels good, too . . . nice crackle . . . let's standardize on this for everything." And the P. A., welcoming the simplification of detail, said "Yes" and went out.

The annual purchases of the paper selected amounted to \$15,000.

When the Paper Users' Standardization Bureau made an analysis of this firm's paper needs, it found that one-fourth of the business records were permanent—expected to stand up through fifty or sixty years of handling. The paper which was being used did not have the stamina needed, and a higher grade of rag bond, selling at 43¼ cents, was recommended to give the necessary strength and long life.

Another 50% of the forms rated high as semi-permanent records. They might be in active use or subject to reference in the files for anywhere from 5 to 30 years. A 28-cent rag-content paper was necessary to give the service required.

The remaining quarter were only temporary records, but they came into contact with the firm's customers, and had to be printed on a rag quality bond. A 21-cent part-rag bond was found entirely adequate for the purpose. The total cost on the new basis figured as follows:

5 tons	43¼-cent	Rag Quality Paper,	\$4,325.00
10 tons	28-cent	Rag Quality Paper,	5,600.00
5 tons	21-cent	Rag Quality Paper,	2,100.00
			<u>\$12,025.00</u>

Not only have this company's paper costs been reduced by \$2975—practically 20%—but each form is now printed on a paper exactly suited to the work it is asked to perform.

The Paper Users' Standardization Bureau determines with scientific accuracy the kind of paper required for each specific purpose. Already more than one hundred of the largest financial and industrial concerns in the country have availed themselves of its service.

In every case the changes recommended have resulted in greater efficiency through the use of the right paper for the purpose.

In most cases they have resulted in appreciable savings.



*This confidential service  
is yours on request*

You can have the broad experience and unusual laboratory facilities of the Paper Users' Standardization Bureau applied directly to your own firm's business papers. The complete service covers the standardization of paper for all letterheads, forms, ledger sheets and card files which you employ. It includes a thorough analysis of your individual paper problems and provides you with a comprehensive report which establishes quality standards, fixes price limitations and simplifies buying procedure.

Because of the scope of this service it can be rendered only to a limited number of corporations this year. It is made without charge or obligation of any sort.

American Writing Paper Company, Inc., Holyoke, Massachusetts.

# EAGLE



# PAPERS

THE RIGHT PAPER FOR THE PURPOSE

## *Eagle-A Bond Papers*

Coupon, Agawam, Persian, Contract, Airpost, Chevron, Acceptance, Norman, Telephone.

## *Eagle-A Ledger Papers*

Brunswick Linen Ledger, Account Linen Ledger, Extension Ledger, Gloria Ledger.

## *Other Eagle-A Business Papers*

include Covers, Books, Offsets, Bristols, Mimeograph and Manifold Papers.

LOOK FOR THE EAGLE-A MARK IN THE PAPER YOU USE



## Waukesha-Powered Linn Tractor Snow Plows in New York State



A-771-M

## Gasoline Maintains Nation's Communications Opening Highways in Winter a Vital Necessity

**HAND TO MOUTH BUYING** has become institutional. Fast package delivery by truck, replacing freight, has become a vital factor in this modern scheme of distribution.

**YEAR 'ROUND COUNTRY HOMES** are rapidly drawing the city dweller to more healthful surroundings. He owes the emancipation of his family to the independent transportation of the automobile, cement roads, private country day schools, telephones, super-power electric transmission systems, truck distribution and bus transportation.

**WHEN SNOW COMES** this system would be paralyzed were it not for progressive State Highway Departments and the ingenuity of automotive manufacturers. They have developed these powerful gasoline-driven snow plows that quickly clear miles of highway in a few hours and restore communications.

**TODAY**, in any of our northern states, a hard surfaced street, free from mud or snow, is now available to the city dweller who ventures a country home on a state arterial highway.

**GASOLINE ENGINES** have contributed more than any other one thing to this change in our national habits. Waukesha Heavy-Duty "Ricardo Head" Engines have done their bit in this reconstruction. They are used in Trucks and Buses for transportation, and in Power Shovels, Cranes, Concrete Mixers, Rock Crushers, Sand and Gravel Loaders, Highway Paving Machines, Industrial Locomotives and Portable Air Compressors used in road building.

**ECONOMICAL TO USE**—All Waukesha engines are designed to stand 24-hour continuous service for months at a time. They run on gasoline and use little of it for the power they develop, due to their use of the "Ricardo Head." If you have a genuine problem requiring portable power, low initial investment and simplicity of operation, Waukesha has engines from 20 to 125 H.P. available and built in both four and six-cylinder types. If you have a power problem requiring gasoline power, just have your secretary drop us a note—it will bring one of our engineers. His advice is yours without obligation.

**Waukesha**  
Ricardo Head

HEAVY-DUTY GASOLINE ENGINES

G-802-2N

No. 9 of a Series

**WAUKESHA MOTOR COMPANY**

Waukesha

Wisconsin

Exclusive Builders of Heavy Duty Automotive Type Gasoline Engines for Over Twenty Years

When writing to WAUKESHA MOTOR COMPANY please mention Nation's Business

capital those industries (like iron and steel) which have been underdeveloped; to discourage any duplication or excess capacity of industrial equipment by withholding capital; to build no more shoe factories than are sufficient to provide shoes for the people of Russia, no more textile mills . . . etc."

Five hundred people are employed at the central office of the Gosplan in Moscow. Little Gosplans coordinate the activities. Each constituent republic has such a local planning board; so has each major district and each smaller provincial area. "No major step in industry, agriculture, transportation, superpower, or finance can be taken without the visa of the Gosplan. It is the clearing house of the whole industrial structure."

The two objectives of the Gosplan are to bring Russian economic output up to a pre-war basis of productivity and to make the country economically self-sufficient. Reports indicate that the first of these objectives has been obtained.

Under the five-year plan industrial production should increase 78 per cent against an agricultural production increase of 30 per cent. This should bring about a better balance between industry and agriculture. The first year's industrial increase is 13.7 per cent against a planned increase of 15 per cent; for agriculture the figures are 8.7 per cent against 6 per cent. These figures may not be correct but are close enough to indicate that the five-year program may be carried out.

Five major difficulties stand in the way of Russia's development. The Gosplan finds that industry is growing too slowly; that population is increasing faster than it can be cared for; that agriculture and industry are out of balance; that it is difficult to draw the line between industries producing capital goods and those producing consumption goods; and the difficulty in finding the technical ability to carry out these projects.

## What Comes from Too Much Reading of Advertisements

**THIS** excerpt from a story in *Western Advertising* by John Eugene Hasty we recommend to our readers.

"A beautiful girl she was—and refined. They were married in the spring; and hardly anyone at the wedding was what you could actually call swacked. For a year or thereabouts, Tom and his bride were the happiest couple imaginable; and then—for what reason, who can tell?—Tom began reading the advertisements. Oh, he was cautious about it; for months, no one suspected it. But a thing like that is bound to out. It wasn't long before it began to tell on him.

"For example, he came home one evening and handed his wife a can of sauer kraut. Somewhere—some time—he had seen an advertisement showing a man handing his wife a can of sauer kraut, and the picture showed her accepting it smilingly, delighted. He could not understand why she struck it from his hand and threatened to go back to her mother.

"Another time, he seized a kettle of boiling water and turned it on the living room floor, later explaining that he had seen the man in the advertisements doing the same thing. And if you had by chance picked up the April 23 issue of the *Times*, you would have read that he had been arrested for walking down the street with a garter



about his neck, and clad only in his underwear. His only defense was that he had seen such things in the ads."

"Ah, but you yourself have gone out attired only in your underwear," I interrupted.

"True," Hunt responded, "but I was trying to find out whether such a practice really was just as foolish as being without a certain brand of cough drops. Not so with Tom. He was not gifted with an analytical mind. He accepted advertisements at their face value, believed in them implicitly. It was that weakness which eventually brought about his ruin."

## Regulating Supply and Demand for Agriculture

UNDER the title "Interesting" the *Pennsylvania Stockman and Farmer* reviews the fact that the Treasury Department and the Attorney General are trying to find out, "in view of the tariff law and the most favored nation treaty, whether Germany is dumping steel in this country." If such a condition is found to exist, an anti-dumping order may be issued. Dumping is regarded, both by our Government and other governments, as an unfair method of competition. "At the same time several organizations of farmers are proposing what are essentially dumping measures in the exportation of farm products. An interesting situation, but then this is an interesting world to those who can view it calmly."

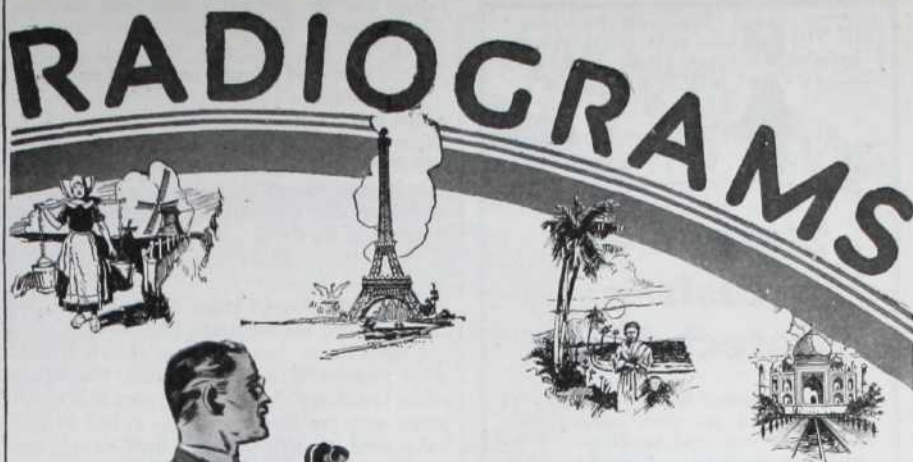
While discussion is being carried on in an attempt to market the already considerable surpluses of farm products, the Reclamation Service of the Department of the Interior is bringing into productivity more lands. Against this condition the *South-Western Ruralist* protests.

"The *Capital Journal*, a Salem, Oregon, daily, editorially condemns the plan of the Reclamation Service to bring in a vast area of new land in the Columbia River Basin. This protest is based on the ground that 'agriculture is suffering a depression due principally to over-production and the addition of such large intensive farming area will greatly increase the surplus production and hence diminish returns to the producer, and greatly multiply his troubles. . . .'

"In adding other acres to our productive farm lands the Government is simply adding other burdens to those that beset us at the present time, and is again guilty of gross inconsistency, for while it is out spending millions of dollars creating competition in agriculture, it is out spending other millions of dollars preventing competition in various and sundry public enterprises, notably our transportation facilities. . . . If this policy toward the railroads is sound—and we think it is, basing it upon proper valuation—then it certainly follows that the policy toward agriculture pointed out is unsound and unjust."

## Some Phases of The New Competition

AN EDITORIAL on competition in the *Bulletin* tells of how a retailer is suffering from the competition of ice companies selling refrigerators at cost and public utilities selling refrigerators to increase the use of current. This is another example of how "the more or less innocent bystander may be caught between opposing forces." But of considerable more in-



## Leading banks and exporters use RADIOGRAMS...WHY? Speed, accuracy—AND MORE...

Big business demands fast action. So leading banks, importers and exporters use Radiograms "Via RCA."

Radiograms go direct to twenty-three countries, entirely without relay. They offer the most direct means of communication to most of the other countries. Speed, accuracy—and more....

The modern communication service of Radiograms is growing in popularity "Via RCA" and use daily. Mark your messages

File Radiograms to Europe, South America, Africa and the Near East at any RCA or Postal Telegraph office; to transpacific countries at any RCA or Western Union office; or phone for an RCA messenger.

### RADIOGRAMS GO DIRECT TO:

Belgium...France...Great Britain...Germany...Holland...Italy  
Norway...Poland...Sweden...Turkey...Liberia...Argentina...Brazil  
Colombia...Dutch Guiana...Porto Rico...St. Martin...Venezuela  
Hawaii...Japan...Dutch East Indies...the Philippines  
French Indo-China...and to ships at sea.

### RADIO CORPORATION OF AMERICA

OFFICES: NEW YORK CITY

64 Broad Street.....	Hanover 1811	126 Franklin Street.....	Walker 4891
Produce Exchange.....	Bowling Green 8012	25 East 17th Street.....	Algonquin 7050
120 Cedar Street.....	Rector 0404	264 Fifth Avenue.....	Madison Square 6780
19 Spruce Street.....	Beekman 8220	19 West 44th Street.....	Murray Hill 4996
	102 West 56th Street.....	Circle 6210	
	BOSTON—109 Congress Street.....	Liberty 8864	
	SAN FRANCISCO—28 Geary Street.....	Garfield 4200	
	WASHINGTON, D. C.—1112 Connecticut Avenue.....	Main 7400	





## Stamps are cash—protect them

The Multipost keeps stamps, in rolls, locked in one safe place. Prevents loss and spoilage. Discourages misuse. Records each stamp used. Provides simple method of accounting for stamps used, as well as bought. Saves time—does 5 hand operations in one split-second thrust of its plunger. Also, clean, sanitary, orderly.

## MULTIPOST

STAMP AFFIXER AND RECORDER



Used in over 100,000 offices. Representatives in all principal cities.

**free trial**  
in your own office to prove its economies.

### Mail this Coupon

Multipost Co. Dept. D Rochester, N.Y.  
☐ Send Multipost on free trial or  
☐ Send Booklet on important economies in stamp handling and control.

Name \_\_\_\_\_  
 Firm \_\_\_\_\_  
 Address \_\_\_\_\_

### Now Ready!

## The 1927 NATION'S BUSINESS Index

A copy will be sent you  
free for the asking

When writing please mention Nation's Business

terest was the tale of a company in New Jersey that is advertising ice as "safe and silent." What company would have sold ice as "safe and silent" ten years ago?

"The 'silence' and 'safety' of ice became talking points worthy of advertising when a machine which may be noisy and which may use ammonium or other chemicals begins to cut ice sales.

"Thus do advertising appeals change from time to time.

"And thus comes a new alignment of competing forces.

"The department store feels the competition of the ice company!"

Competition has brought the independent retailer face to face with the chain store problem. Many have met this challenge and are the better for it but others have used it as an alibi for inefficiency, according to the *San Francisco Grocer*.

"What difference does it make whether the chains get credit for the weak sisters dropping out? If it wasn't the chains, there would be some other equally pathetic reason. Everyone in business can't flourish.

"If the country was conducted under a strict socialistic plan, it would be just the same. The real reason, however, would be a dislike for actual work. . . . Don't worry; the day of the independents will be here long after many chain stores have gone by the board. Some will be successful and some won't; but rest assured they will always be here."

Competition has also been in part responsible for the increased use of labor-saving machinery. The workers thus released must find jobs elsewhere. That the absorption up to date has been adequate, *American Metal Market* doubts, but is ready to admit for the sake of argument. Industry, however, owes a job to workers, not so much on moral grounds as on economic, the editorial continues.

"Admittedly the activity of industry is based on the maintenance of buying power, and this is not maintained if men are released. The success of industry in the next few years depends on the amount of progress made in supplying additional employment. This cannot be done by expanding production of steel, automobiles, radio . . . etc. Such lines cannot expand sufficiently to take up the slack. No contribution can be made by farming. . . .

"In considering the future of trade, we shall do well, in addition to scrutinizing current trends, to study the new developments and prospects of new developments that promise additional jobs for those who are being released by increasing efficiency in the older lines of activity."

When carbon incandescent lamps were driven out of stores by the gas arc, electrical manufacturers developed the tantalum and tungsten lamps and "settled back once more to enjoy the well-known satisfactions of supremacy," according to *Electrical World*. Since then the electrical industry has been forging ahead, but the gas industry has been observing. The gas man is developing long-distance transmission of high-pressure gas. "He is discovering by rate research how to sell gas more cheaply. . . . He is extending mains into outlying territory. He is getting ready to make a drive into the fields of domestic and industrial heating with a competition that before long may bring a rude awakening to the power companies. And the gas man is to be congratulated upon his vision and his enterprise."

"Constructive efforts to expand any ser-

vice will bring rewards to all industries, and the electrical industry should welcome an awakening of the gas industry. Cooperation, the adoption of sound sales policies, friendly rivalry for market exploitation and full recognition of the big opportunities for better business for both industries constitute a basic program for action. Super-power and super-gas should march as allies to conquer their markets."

Such a spirit shows that some industries are realizing what cut-throat competition means. President James B. Keister of the National Paint, Oil and Varnish Association, in the *Paint, Oil and Chemical Review*, says:

"I have a profound conviction that the time is here, right now, when every business man, whether in our industry or some other, must be made to see that the present system of cut-throat competition in evidence in practically every line of commercial enterprise is deliberate suicide, and must be replaced by a kinder collective policy, with every man willing that his competitor shall have his place in the sun and a fair show so long as he lives up to the rules of the game."

## People Now Invest Dollars Rather Than Deposit Them

AN INTERESTING angle of the investing versus consuming controversy is presented by an article in the *American Bankers' Association Journal* entitled "Making the Dollar Hustle," by John J. Pulleyn, president of the Emigrant Industrial Savings Bank, New York City. He states that, while the rate of increase in savings deposits during 1927 was the smallest in twelve years, it is accounted for by the fact that more people are investing their money. There are now more than fifty million savings accounts with an increase in 1927 of a million and a half depositors and an increase of \$1,368,000,000 in deposits.

"I am optimistic about the progress of thrift in this country. It is true that the savings habits of the people are changing and that there is a growing tendency to use the savings bank as a reservoir for the accumulation of funds rather than as a place for more or less permanent keeping," writes Mr. Pulleyn. He does not touch on the question that is agitating many people whether it is wise to have so much money being invested in productive enterprises when already there is excess capacity and the pressure on sales is tremendous. Many economists are emphasizing the importance of "reasonable economy" or increasing consumption.

A market which absorbs nine million dollars' worth of securities as against six million in 1926 and not quite six in 1925, "does not indicate a lack of thrift and saving," as Mr. Pulleyn points out, but it does present an interesting problem on how long productive capacity can be increased.

Another form of saving is life insurance, for which in 1926 two billions was paid in premiums. "The average person probably has only a very scant knowledge of how great a part of savings is going into the shares of building and loan associations. While figures are not yet available to show the gain for 1927, the increase in the assets of these associations was around 770 million dollars for 1926."

Investment trusts are credited with a capital of about six hundred million dol-



# THIS BUSINESS OF REMINDING



**B**USY days...crowded hours... flying moments... life filled to the brim with things to do. Letters to dictate, people to meet, trains to get, goods to buy, goods to sell. Hard work, hard play and through it all, many important decisions to be made.

A new furnace for the house. What shall it be—oil or coal? A new safe for the office. Where to buy? A contract to award. To whom shall it go? He has a multitude of needs to satisfy—this busy modern business man. And money in abundance to spend. *Where* he

spends it is oftenest decided by advertising. So, through advertising, dozens of products and services are competing for his attention each day.

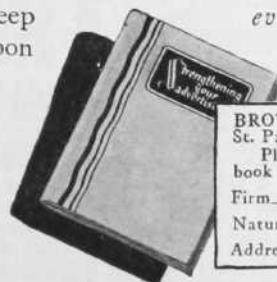
To win his attention is not especially difficult. To engage his interest, to create advertising that will stick in his memory until the time has come to buy—that is a problem which calls for exceptional skill. Advertising in the newspapers and magazines, by constant repetition of an exclusive selling theme, will unquestionably make a deep and lasting impression upon the reader's mind.

But there is another peculiarly effective method of keeping memory alive. It is Remembrance Advertising. It is the pleasantest, friendliest form of advertising in the world—persistent, persuasive, psychologically sound. Don't you want to know about it? A complimentary book which tells the story of Remembrance Advertising will be sent upon request. Mail the coupon below.

\*\*\*

*There is a definite use for Remembrance Advertising in every well-balanced sales campaign*

**BROWN & BIGELOW**  
*Remembrance Advertising*



**BROWN & BIGELOW**  
St. Paul, Minnesota

Please send complimentary copy of book on Remembrance Advertising.

Firm \_\_\_\_\_

Nature of Business \_\_\_\_\_

Address \_\_\_\_\_

ST. PAUL, CHICAGO, NEW YORK, SAN FRANCISCO, SAULT STE. MARIE, HAVANA, MEXICO CITY, HONOLULU

*When writing to BROWN & BIGELOW please mention Nation's Business*



# Mergers

**THE MERGER** is the practical, modern-day method of *reviving the fittest*. Survival of the fittest today is not enough. Revival is necessary—new life, new energy, new effort—economically.

The Merger is much more than just getting together. It picks the best of the necessary and the vital from many similar efforts and makes them into one supreme accomplishment.

One major value of the Merger is the opportunity it presents for *eliminating waste in industry*—not alone waste of time and material, but the larger mental and physical wastes—duplication of efforts, capital, organization.

The elimination of waste from American business during recent years now represents a saving of nearly \$1,000,000,000 a year and is mainly the result of following the constructive suggestions of the Hoover Committee on Waste in Industry. Mergers are helping materially to increase this saving.

The Merger is no plaything. Every detail, from its conception to its smooth and effective operation, demands *exact knowledge*—based, not alone on facts and figures, but on intimate and practical Accounting experience in many fields and nationwide in extent.

## ERNST & ERNST

ACCOUNTANTS AND AUDITORS  
SYSTEM SERVICE

NEW YORK	PITTSBURGH	CLEVELAND	CHICAGO	NEW ORLEANS
PHILADELPHIA	WHEELING	AKRON	MILWAUKEE	JACKSON
BOSTON	ERIE	CANTON	MINNEAPOLIS	DALLAS
PROVIDENCE	ATLANTA	COLUMBUS	ST. PAUL	FORT WORTH
BALTIMORE	MIAMI	YOUNGSTOWN	INDIANAPOLIS	HOUSTON
RICHMOND	TAMPA	TOLEDO	FORT WAYNE	SAN ANTONIO
WINSTON-SALEM	CINCINNATI	ST. LOUIS	DAVENPORT	WACO
WASHINGTON	DAYTON	MEMPHIS	DETROIT	DENVER
BUFFALO	LOUISVILLE	KANSAS CITY	GRAND RAPIDS	SAN FRANCISCO
ROCHESTER	HUNTINGTON	OMAHA	KALAMAZOO	LOS ANGELES

lars, of which "a good part of this sum doubtless represents the savings of individuals. This huge amount of capital has been subscribed during the past five or six years."

It is estimated that nearly half of the twenty-four million houses in this country are owned by the people that occupy them. More than 150,000 new houses are being built annually, and though probably not half are being built by individuals yet the figure gives an indication of where savings go.

## Problems of Sales and Systems Face Retailers

**ADVERTISING** as well as sales has suffered from a loss of faith. In commenting upon the growing practice in the shoe trade of customers demanding a guarantee against price declines, the *Boot and Shoe Recorder* writes: "Isn't there something radically wrong with selling methods when people take such an attitude? Have they not lost all faith in sales?"

The comments of an executive of one of the large and successful stores in Australia prompted *Dry Goods Economist* to take up once more the dangers in too much systematization. "When we find a good thing we are rarely content to use it in moderation but must always rush to extremes, and it is this characteristic expressed in retailing practice" which meets condemnation. Too little system is, the *Economist* finds, a great evil and one that is responsible for "driving thousands of retailers out of business today and has thousands more hanging by their finger tips over the precipice of failure."

"The point we wish to make is that too much system can be just as much an evil as too little and that any business must expect a certain percentage of loss due to inefficiency and dishonesty as long as it depends for motor-power on that very imperfect machine—human nature."

## Turkey's Recovery the Influence of One Man

**THOUGH** nominally a democratic republic the actual government of Turkey is in the hands of one man, Mustapha Kemal Pasha. The *Index* finds the country impoverished but "with a sounder framework for future progress than it has ever possessed in the past."

From the same source we gather that Mustapha Kemal's reputation began as a military leader in the war when "he was in constant opposition to the military policies of the Ottoman Government and the German authorities." He was elected president when the Grand National Assembly of the new Turkish state was formed in 1920. On the abolition of the Sultanate in 1923 and the establishment of the Republic of Turkey he was elected president.

Though the economic progress of the country has been slow, yet the country is a very different Turkey from that of pre-war. The most notable accomplishment is the balancing of the budget for 1927-28 with an estimated revenue of 75 million dollars. "The country is chiefly agricultural, and its purchasing power is directly dependent upon its crops."

"Principal agricultural products are tobacco, cereals, figs, silk, olives, dried fruits, nuts, hides, wool, cotton, gums and opium."

## Scientific Facts About Diet

A CONDENSED book on diet entitled "Eating for Health and Efficiency" has been published for free distribution by the Health Extension Bureau of Battle Creek, Mich. Contains set of health rules, many of which may be easily followed right at home or while traveling. You will find in this book a wealth of information about food elements and their relation to physical welfare.

This book is for those who wish to keep physically fit and maintain normal weight. Not intended as a guide for chronic invalids as all such cases require the care of a competent physician. Name and address on card will bring it without cost or obligation.

HEALTH EXTENSION BUREAU  
SUITE J-438 GOOD HEALTH BLDG.  
BATTLE CREEK, MICHIGAN

## LITHOGRAPHED LETTERHEADS

**\$1.25 per 1000**

IN LOTS OF 50,000  
25,000 at \$1.50—12,500 at \$1.75 or  
6,250 our Minimum at \$2.25 per 1000  
Complete—Delivered in New York

**ON OUR 20 LB. WHITE PARAMOUNT BOND**

A Beautiful, Strong, Snappy Sheet  
HIGHEST GRADE ART WORK AND ENGRAVINGS  
GEO. MORRISON COMPANY

553 West 22nd St. New York City  
SEND FOR BOOKLET OF PAPER AND ENGRAVINGS



... The cotton harvest for 1925 was over 200,000 bales, \$29,651,053 being the value of the proportion exported. 114,500,000 pounds of tobacco were produced this year." The position of the leading countries in Turkish trade is shown by the following table:

	Imports from	Exports to
Great Britain.....	\$15,138,726	\$6,976,510
Italy .....	17,368,430	20,196,287
Germany .....	10,932,829	11,065,120
France .....	10,431,186	9,672,808
United States.....	7,861,229	10,041,173

Of the 1,220 factories the greater proportion are unimportant. Efforts have made by the government to found a sugar industry, but little progress has been made. "A creditable government project is the construction of the Angora-Kaisaria Railway, which was completed last May at a cost of \$3,085,000. It was built entirely by Turkish engineers—which is unusual—and was financed by the government. The government has nine railway projects under consideration totaling over 2,445 kilometers."

Fear of international control has prevented serious efforts being made to borrow from abroad, urgently as capital is needed. "The president has taken keen interest in improving conditions of agriculture and has encouraged the importation of modern agricultural machinery. The only difficulty is the fact that the peasants are so uneducated that the management of machinery is difficult."

## Ideas for the Business

### Man After Office Hours

**FARM LIFE** tells of Herbert Hoover's plan for relief work in the Mississippi flood. "The plan was to telephone to a leading citizen in each town, asking these men to lay down floors for tents and look after food supplies and other needs. Often a town thus selected would be small and called upon to care for several times its population."

But in all this tremendous test of leadership and humanity and ability, there was only one failure. "It was a splendid record, peculiarly American," the Secretary said, "we can feel confident of our national future, with so much leadership as we possess and with the ability that we have of rising to every crisis." These are, indeed, matters justifying pride and faith. In the last analysis it is character and not fertile fields, tall buildings or even vaults bulging with gold, that comprise the national strength."

Describing the Department of Commerce as the "Orphan Annie" of the government, *Dry Goods Economist* points out that the 1928 budget provides thirty-six and a half million dollars for it as against eight hundred million dollars for the Navy and Army.

"Soviet Russia proposed that all nations agree to complete and mutual disarmament, but the proposal was not taken seriously because nobody believed in Moscow's sincerity."

"It is probably true that complete disarmament is impractical, because men are only boys grown tall and they must not have their nice little guns and soldiers taken away from them; but when the United States proposes to spend twenty-two dollars preparing for war as against every dollar spent for the promotion and development of its commerce, it is at least time to stop bragging about our intelligence."



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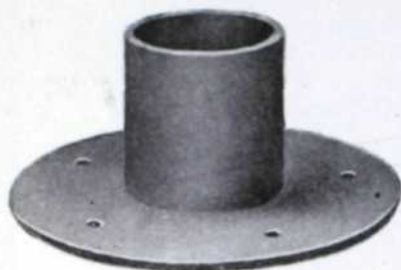
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# AMERICAN METAL STAMPINGS

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## HUMAN NATURE IN BUSINESS



By FRED C. KELLY

SEVERAL months ago, a young man of my acquaintance lost his job as teller in a bank. I have a sneaking notion that perhaps his accounts weren't in any too good condition. But if there was anything seriously wrong, he was never prosecuted and was allowed to resign. The next I heard of him he was an automobile salesman.

This may seem a far cry from standing at a window in a bank. Yet such a shift was not illogical. This man was accustomed to dealing with people, and, moreover, his connection with the bank had given him a large acquaintance with people having bank accounts, who should be able to buy automobiles. He might do well as an automobile salesman.

BUT encountering this man in an automobile salesroom set me to thinking about the big turnover of such employees. Automobile salesmen seem to change their jobs almost as frequently as day laborers. I asked the manager of a successful automobile agency how this comes about.

"The fact is," he said, "that we are raising here in America an extraordinarily large number of well-bred, well-educated young men who don't amount



to much. They don't know exactly what they want to do and have no bent or training for anything in particular.

They went to college, not because they were eager for any special line of preparation, but because their parents considered it the socially proper thing to do. Their chief interest has been driving about in the family car. It is the one thing they understand and are able to talk about authoritatively. When they get married, or for any other reason have to consider making a living, the automobile is naturally the first thing they think of. Sometimes they make a success of selling. But too often they aren't willing to put enough effort into the job and become drifters."

NOT long after that I became impressed with the striking difference between salesmen for pleasure cars and

for motor trucks. The man who sells trucks is often a high-grade business man of long training, often an engineer, and capable of negotiating with a big corporation for a whole fleet of trucks. He has cost figures at his tongue's end and is prepared to show with scientific precision just what savings should come to the possible purchaser from better trucking facilities. The no-account fellow doesn't often undertake a job selling trucks because he has always been more interested in pleasure cars.

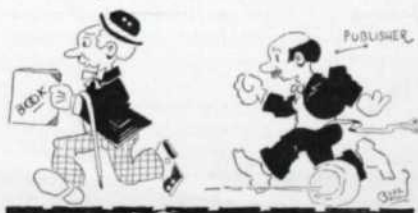
A STUDY of industrial accidents in a Japanese Government arsenal reveals that a minimum number of accidents occurred in February and April—the maximum in August and September.



ber. The worst days of the week for accidents were Wednesday and Thursday. As the length of service increased, the number of accidents correspondingly decreased.

IN LONDON last summer I heard a story about Thomas Hardy, the novelist, that almost seems to belong in a column about human nature in business. A friend of mine had asked Hardy what he considered his best novel. Hardy replied that his favorite is "A Pair of Blue Eyes," not so much because of its merit but because of the circumstances of its publication.

It was one of his earlier novels, and at the time he offered it to a publisher his funds were so low that he was almost desperate. It looked as if life it-



self depended on a favorable decision from the publisher. In due course the publisher sent for Hardy and told him:

"We have decided to bring out your book provided you will re-write the last



# Why do people clean their glasses?



**B**ECAUSE it is hard to see through dust, which has the same dimming effect upon electric lamps that it has upon eye-glasses. Glasses have to be cleaned often. Light fixtures should be. Lamps in many offices and factories would give 25% to 50% more light, just for the cleaning.

Empty sockets and burned-out lamps are expensive, for poor light causes eyestrain, headaches, loss of time, accidents. Good lighting is a sign of good management. Examine your light-

ing facilities, then write to Division G1, Edison Lighting Institute at Harrison, N. J., and without obligation we will send you bulletins concerning the proper illumination in your particular kind of business. Edison MAZDA\* Lamps represent the latest achievements of MAZDA Service, through which the benefits of world-wide research and experiment in the Laboratories of General Electric are given exclusively to lamp manufacturers entitled to use the name MAZDA.



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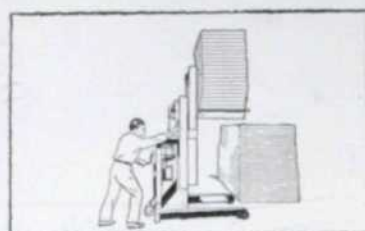
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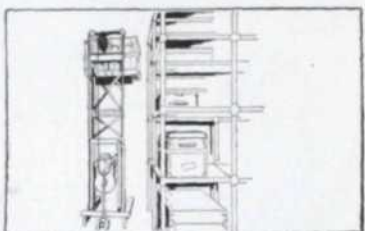
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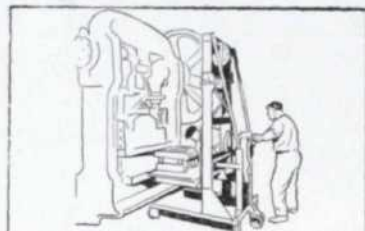
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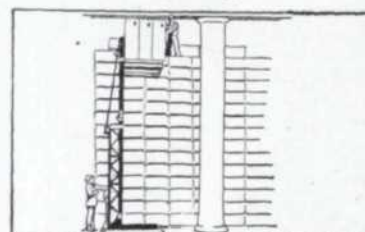
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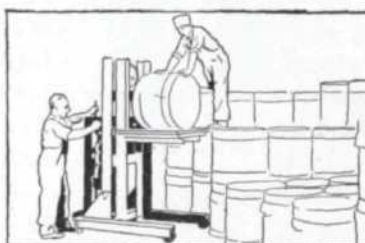
Storing valuable cases in safety vault



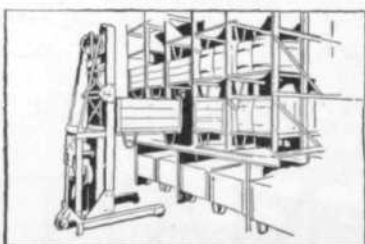
Placing die in press



Piling cases ceiling high



Piling rolls of paper



Placing loaded lift-truck platforms in storage rack

chapter"—and went ahead to outline the changes that seemed wise.

Hardy shook his head. "No," he said, "such a change would make an inartistic piece of work. Unless it is published exactly as I wrote it, it must go unpublished."

A few days later the publisher sent word that he would accept the book without change.

I'm wondering if more of Hardy's kind of courage would be a great boon to business—the kind of courage that refuses to cheapen a product just for immediate gain. Don't we need more business men who think, as Hardy did, in terms of the long pull?

A CERTAIN great department store has for some time followed a peculiar plan in conducting its basement sales. When an article is offered for sale there, the price tag also bears the date. The price is supposed to be attractive enough to insure a quick sale. If the article is not sold within two weeks, the price is reduced 25 per cent. If, a week later, the article is still unsold, then another 25 per cent of the original price is lopped off. Other cuts are made as time goes on, and any article unsold after five weeks, I think it is, is given away—to some charity.

When the plan was first adopted, the buying public thought it might get lower prices by waiting. The store laid aside a substantial sum to cover losses during the experimental period. But here was the crafty part of the scheme: The main boss of the basement store loses a substantial part of his commission even if only one cut is made in the price of any article. Hence it is to his interest to make the first offering a real bargain price that customers can't resist. To do this he has to buy shrewdly. Wholesale men who deal with him say that he has become the cleverest buyer in the United States.

THE NASH motors company makes a special point of putting a disabled employe back to work as soon as possible after an accident, to encourage him.



Because of efforts to have him placed where his work is best suited to his abilities, it not infrequently happens that a man earns more after an injury than before.

STATISTICAL studies of men and women's tastes, conducted by a college department of psychology, show that men are mainly interested—after the day's work is done—in money, business and amusement, while women are more interested in men, clothes and decoration.



## T O D D A N N O U N C E S

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Whenever checks and other business or personal documents must be amount-written quickly and safely, the Century will prove its usefulness in banks and retail stores, in manufacturing plants and public utilities. Its touch-and-go performance, its amazing speed and simplicity, its versatility, its outstanding value, the perfection of its work . . . all will establish new standards for a moderately priced check writer.

The new Century Protectograph is beautifully finished in nickel and two colors of enamel. None but the finest wear-resisting metals go into its construction. Todd craftsmanship has built this machine so nicely balanced that it operates with unprecedented ease and speed. Throughout, the new Century embodies superiorities that only Todd's twenty-nine years of research and constant development can build.

Let a demonstration convince you that the new Todd Century is the greatest value ever offered in a moderately priced machine.

The Todd Company, *Protectograph Division*. (Est. 1899.) 1130 University Ave., Rochester, N. Y. *Sole makers of the Protectograph, Super-Safety Checks and Todd Greenbac Checks.*

*These features distinguish the new  
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1. Finely balanced working parts give remarkable speed and ease of operation. Handle can be operated with one finger.
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## SAM WILSON and PAUL RODMAN

THEY were two partners in business who had the foresight to anticipate the event which happened, the sudden death of one of them.

It was Rodman who died, and he was the backbone of the management. But the business continued its growth because partnership insurance tided over the necessary reorganization.

The story of these two men and how they made their plans is told in "A Properly Anticipated Event," a booklet which your local John Hancock office will be glad to send you, or it can be obtained by writing to Inquiry Bureau,

*John Hancock*  
LIFE INSURANCE COMPANY  
OF BOSTON, MASSACHUSETTS

197 Clarendon St., Boston, Mass.

NB

**The Yankee of the Yards**, by Louis F. Swift in collaboration with Arthur Van Vliissingen, Jr. A. W. Shaw Company, Chicago and New York, 1927. \$3.

**By-Products in the Packing Industry**, by Rudolf A. Clemen. The University of Chicago Press, Chicago, 1927.

"Chicago in the '70's was a sprawling city with little to recommend it to his energies except a plentiful supply of cattle from the western plains. The Yankee left its 'Yards' the undisputed meat-packing center of the hungry world. . . .

"His battles and his victories were in the field of business. It is this and not the material success he attained, which makes the chronicle of his life a chronicle of commerce." This is a part of the introduction to the biography of his father by Louis F. Swift. The picture of the senior Mr. Swift is perhaps a bit biased by his affectionate son, but nevertheless it's an interesting picture.

Gustavus F. Swift received twenty-five dollars from his father in 1855. This was to set him up in the meat business and also to keep him from going to Boston to get a job.

"Into the hodge-podge of small, dirty wasteful local businesses came the Cape Cod Yankee who was to upset practically every idea which had been accepted in the trade since its inception. His acquaintance with meats and livestock had begun in 1855, at the age of fourteen, when he went to work for his brother, a local butcher. It had continued, and grown, through the different phases of slaughterer, local dealer, export cattle shipper, and wholesale meat dealer until at thirty-five he was partner in two large, well-established firms and sole owner of a third."

He saw the advantage of slaughtering west and shipping east, for the cattle lost in weight by the shipping, the middlemen gained profits, and freight costs were paid on the inedible half of the cattle along with the edible portion. The development of the refrigerator car made this plan practicable in summer as well as winter.

About 1876 Mr. Swift shifted to Chicago. James A. Hathaway, with whom he had been a partner, refused to follow him in such a radical move and forced a partnership dissolution. Swift's share, thirty thousand dollars, was far too small to allow a comfortable working capital even for those days. However, he was offered little competition by the big firms in Chicago who were engaged in the pork-packing business. They thought he would hang himself in the new-fangled business if he had enough rope.

But by dint of every effort possible he was as soundly entrenched financially as his competitors before they realized the profits of the fresh beef industry. Then he had a head start in the beef business which they could not overtake despite their more solid pork businesses.

Mr. Swift was a born expansionist.

When the panic of '93 struck, he had just been expanding down the Mississippi River on the theory that he could save even more freight than from Chicago. The theory was right; but the panic struck while he was owing \$10,000,000.

Rumors of his failure brought long lists of creditors, whom he repeatedly reassured by reminding them that he had always paid notes when due. With the help of money lent by department heads and even by many of the subordinate employes the company pulled through—by none too wide a margin.

"Any one meeting Gustavus F. Swift was at once impressed with the fundamental honesty of him. It was in his face, in his manner, in his whole personality. One knew, instinctively, that here was a man to be trusted to any extreme. . . . Physically he was over six feet and weighed about a hundred and ninety. . . . His whole appearance was enough to lend money on." He went through the panic by sheer force of personality.

While eastern slaughterers were glad to have people cart off the "waste" part of the carcasses, Swift was making a "hobby, almost, of fertilizer and a few years later of oleomargarine." He was a man who would ever so often go back behind the packing plant and inspect the sewer to see whether any fat was escaping. By such rigid economy, he built a large plant on the narrowest of margins.

He is reputed to have first made the remark later so popularly used to show the efficiency of large packers, "Now we use all of the hog except his squeal."

## Meticulously Right

MR. SWIFT, to his subordinates, seemed to have a hobby of complaining. He fired men for having dirty arms. He objected in his strenuous way to having suet crumbs left on the carcasses. And he had the killing floors scrubbed every night with sal soda instead of soap. It was these subordinates trained in his meticulous ways of doing things just right instead of good enough who were afterwards managers of the business.

One of the old time rule-of-thumb managers was Swift. He watched all the details of his business until it was far too large for one man to manage and even then insisted on having the facts of claims.

He considered his time highly valuable. Never would he waste a minute of it. "When he went to catch a street car, his driver was never allowed to stop for the first car. Instead, the horse was speeded up and the next street car ahead overtaken."

He wrote letters on half sheets and expected others to be as considerate of him. When his managers wrote him lengthy letters he tossed them over to his secretary with an impatient "What does it say, what does it say?" His secretary let few get by without making the summary first.

Neither had he any patience with clock



watchers. He is quoted as saying: "When a clerk says he must leave the office because it is five o'clock, you'll never see his name over a front door."

It was Swift who made the meat cure formula standard. Before, every head man of a plant had his own secret formula for the cure of pork. When a batch of meat went sour in one of his branches, Swift decreed that all formulae should be sent to the central office, where the best would be chosen and used by all offices thenceforth. Every meat curer, of course, threatened to quit, but the formulae came in. Since then meat curing has been on a scientific basis.

His vote in office conferences was the majority. He overruled among other things the unanimous vote that the meat-cure formulae should not be given up.

But his overruling the conference was not intended to be overbearing toward his managers. He knew the business so thoroughly that when he was convinced, the matter at hand was decided. No need to waste the time of himself and the managers by further discussion.

"I can raise better men than I can hire" was one of the sayings of Swift. To send a man for miles to do some little errand such as see the roof drainage on an ice house or count the windows of a cooler not only made that man watch out for details in the future, but the story was usually striking enough to go the rounds of his other employes and taught his methodism to far more than the one man directly concerned.

#### Of Raises and Lectures

ONE clerk who worked a year for fifteen dollars a week went into the boss's office to ask for a two-dollar raise. Instead he received a two-hour lecture on the poor way he did his work and his lack of interest in his job. The clerk later said that he even appreciated being allowed to stay there at his old salary. Afterwards when the man was making \$10,000, Swift explained to him "You were doing right well for a young fellow. Not bad at all. But I thought you had the makings of something better than an ordinary clerk and I wanted to see. I jumped on you that day just to put your feet on the ground. It made a man of you, that talk did."

That's the picture of an individual. A picture of the modern industry is given in "By-Products in the Packing Industry" by Rudolf A. Clemen. The book is dedicated to J. Ogden Armour, but the profitable use of by-products came up about the same time in all the packing plants. In fact, the first use of them was by independent concerns that bought up the waste products. When they proved of value the packing plants took over the processes.

In the utilization of waste one of the prime factors is that there be sufficient waste collected in one place to make the process profitable or at least that the collection shall be cheap. "In the meat industry it was impossible to make use of the offal during the period of the local butcher and slaughter house. It was only when these wastes became accumulated in large quantity, due to the growth of large-scale packing plants, that they could be used as raw material for by-product manufacture."

The volume of inedible by-products as listed by Mr. Clemen, is surprising. The following is slightly abridged:

From wool, hair and hides — leather,



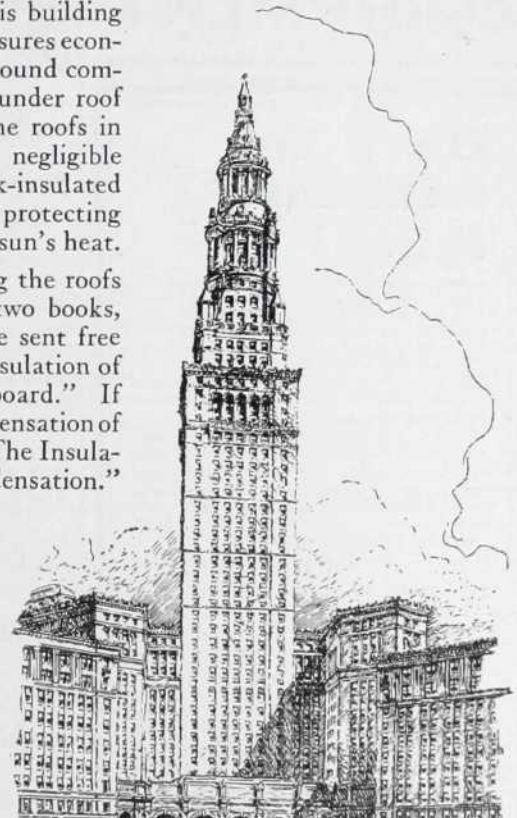
## Cleveland Union Terminal Has Cork-Insulated Roofs

THE new Union Terminal Building, now rearing its 52-story tower above the Public Square in Cleveland, Ohio, has its roofs insulated with Armstrong's Corkboard.

Insulation of the roofs of this building with Armstrong's Corkboard assures economy of heating fuel, and year-round comfort for tenants of the offices under roof areas. Heat losses through the roofs in winter will be reduced to a negligible amount. In summer, the cork-insulated roofs will be just as effective in protecting offices under the roof from the sun's heat.

The advantages of insulating the roofs of buildings are explained in two books, either or both of which will be sent free on request. Write for "The Insulation of Roofs with Armstrong's Corkboard." If you are troubled with the condensation of moisture on ceilings, ask for "The Insulation of Roofs to Prevent Condensation." Armstrong Cork & Insulation Company, 195 Twenty-fourth Street, Pittsburgh, Pa.; McGill Building, Montreal, and 11 Brant Street, Toronto.

Union Terminal Building, Cleveland, Ohio. Graham, Anderson, Probst & White, Architects. 90,000 square feet of Armstrong's Corkboard are being used on the roofs.



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A Matthews Mechanical Painting Unit will enable you to cut maintenance painting costs in half—do twice as much painting on your present budget. The "Whys and Wherefores" are fully explained in the 12-page booklet, "Mechanical Painting for Maintenance." You will profit by reading the interesting experiences of others given in this booklet—by studying the comparative costs of painting different kinds of surfaces—by glancing over the various Matthews machines and the descriptions of what they will do. . . . Write for this booklet today.



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A sales organization operating throughout the civilized world has recently made some new connections putting it in a position to undertake the distribution of additional products for either or both domestic or export trade.

Many men who know the manufacturing end of a business, find that sales presents a real problem.

We are sales specialists and can put any meritorious article on the market in a big way.

If your domestic market is already developed to your satisfaction and you wish to expand into export trade, it will be worth a stamp to write and tell us what you have and what you would like to do.

If you are already doing some foreign business, we may be able to materially increase it, or to cut your costs, as our connections enable us to operate at less expense than the average individual shipper.

WE SEEK PARTICULARLY RECENTLY PATENTED OR RELATIVELY NON-COMPETITIVE ARTICLES WITH A REAL APPEAL. Merchandise will be handled only on a monopoly basis for either domestic or foreign sale and must be of a nature capable of being sold at a large monetary turnover by single article or by volume.

Business will be handled on a commission basis or we will purchase for our own account for re-sale as may appear mutually advantageous. This is a clean cut sales proposition and schemers, dreamers and promoters will receive no attention.

Tell us what you want to sell at home or abroad. Original communication should be by letter.

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International Marketing  
70 Beaver Street - New York

brushes, binder in plaster, felt, padding, hair for mattresses, glue, and lanolin.

*From sinews, fats and blood*—blood meal, albumen, filler for leather, fertilizer, meat meal, illuminating and lubricating oils, glue, case-hardening bone, gelatin, isinglass, benzoinated lard, lard stearine, and tallow.

*From glands and viscera*—sausage casings, gold-beaters' skins, perfume bottle caps, clock cords, drum snares, catgut, surgical ligatures, pharmaceuticals.

*From bones*—combs, buttons, hairpins, umbrella handles, napkin rings, tobacco boxes, buckles, crochet needles, knife handles, dice, chessmen, electrical bushings, washers, artificial teeth, bone rings for nursing bottles, glue, case-hardening bone, gelatin, fertilizers, oils, soap grease.

*Pharmaceuticals*—Pepsin, pancreatin, thyroid extract, adrenalin, benzoinated lard, pituitary liquid, pineal substance, thrombo-plastin, red bone marrow.

Need we remind our readers that catgut is not a by-product of the cat-packing industry?

With all we have heard about the importance of the by-products in the meat-packing industry, it is surprising to find how small is the real money return from by-products in proportion to the total value of the animal. Mr. Clemen classifies the value thus: Hogs, 3.4 per cent by-product; sheep, 4.1; calf, 7.2; steer, 4.1. The hides of the sheep and steer, however, bring 14.5 and 8.6 per cent respectively in addition to the by-product values listed above. Notwithstanding the small percentage, the value is important economically because of the volume of these animals killed.

**Business Cycles: The Problem and Its Setting**, by Wesley C. Mitchell. National Bureau of Economic Research, Inc., New York, 1927. \$6.50.

**Business Cycles and Business Measurements**, by Carl Snyder. The Macmillan Company, New York, 1927. \$6.

Since Professor Mitchell introduced the term "business cycle" it would seem that he is most competent to define it: "Business cycles are a species of fluctuation in the economic activities of organized communities. The adjective 'business' restricts the concept to fluctuations in activities which are systematically conducted on a commercial basis. The noun 'cycles' bars out fluctuations which do not recur with a measure of regularity."

All of which seems simple enough at first glance, but Professor Mitchell gives nearly five hundred pages to the subject which grows more complex with every page. The matter is complex because previous writers on economic undulations have written on crises resulting from wars, civil disturbances, weather, harvests, epidemics and what not and attempted to apply periodic laws to the result.

The business cycle, as now defined, is not a length of time but a succession of depression, revival, prosperity and recession following each other indefinitely in the same order.

Professor Mitchell's predecessors have assigned various lengths to periods of business crises—from forty months to eleven years—and have cited series of crises to prove their points. Professor Mitchell has really performed a commendable work in his task of assimilating these multifarious theories of crises into a comprehensible single theory of business cycles.

He begins the work by saying that these previous theories have some truth in them. They at least show the complexity of the problem. And who can doubt that it is complex since everything has been blamed for it from banking operations to the death rate—with figures for every point?

Cycles are, as Professor Mitchell thinks, "recurrences of rise and decline in activity, affecting most of the economic processes of communities with well-developed business organization, and averaging in communities at different stages of economic development from about three to about six or seven years in duration."

Incidentally the theory of Foster and Catchings of the Pollak Foundation falls short. It claims that consumers, in order to keep business active, must receive and spend incomes equal to the full value, at current retail prices, of the consumer's goods sent to market. Then the total selling value of all products would have to be paid out immediately by the business enterprise as wages, salaries, interest, taxes, rent, dividends or otherwise. But business actually makes some goods not designed for consumers yet which it pays to have made.

Professor Mitchell warns us not to confuse the depression phase of business cycles with natural disasters. In countries economically undeveloped such as Europe was some centuries ago, and Russia later and even much of the world is today, crises are brought about by natural disasters such as floods or poor harvests. The true business cycle is found only in countries having highly developed pecuniary organizations such as Western Europe and America of today.

It is to be noted that the severity of earlier panics was diminished to crises and have now become "depressions." We no longer mention the number of people who die from famine or plague as a result of business depressions.

Mr. Snyder stands on the plank that a business cycle is a boom in building or expansion and its following recession. Business booms and business depressions are further defined as variations in the normal rate of growth.

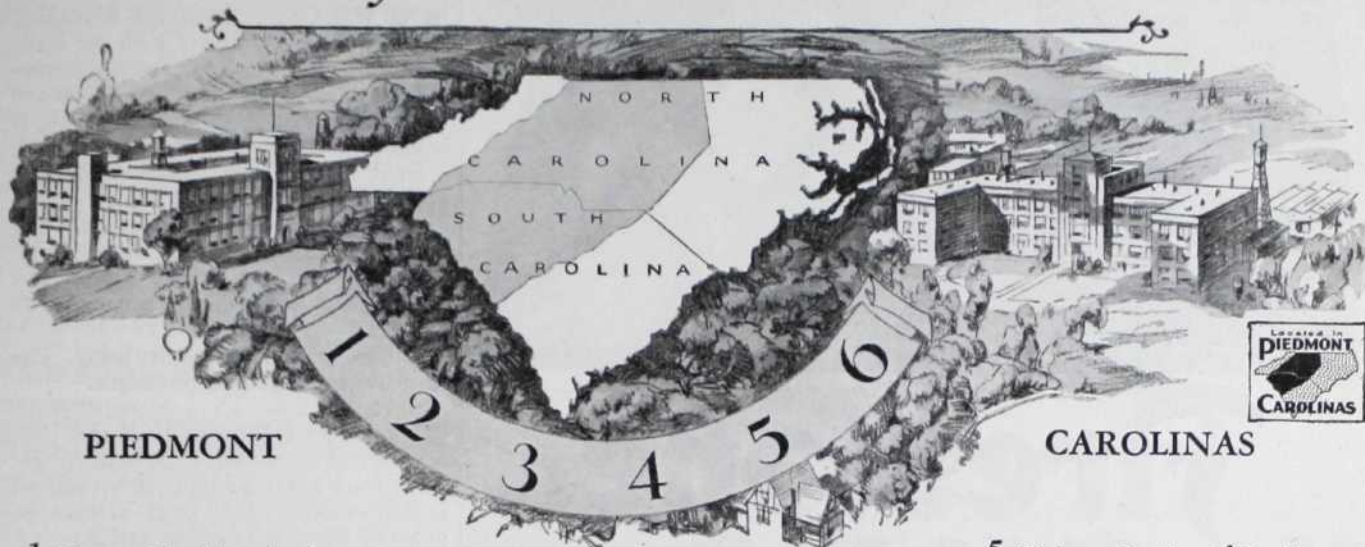
America's first cycle, in its true meaning, was the boom ending with 1873 and the following decline. Then came the "half fabulous expansion of the eighties, in some ways the most amazing boom that this and probably any other country ever enjoyed. It brought in ten years the construction of 60 thousand miles of railway, and the opening of what remains today, the most fertile agricultural empire of the world." The reaction from the glut in the food markets caused by this and similar expansion in other agricultural countries was a "world-wide depression in agricultural prices. The panic of '93 and the ensuing depression was to an extraordinary degree the replica of '73-'79." After this came the rebound with rising prices which ended (with a brief interim in 1903-4) in the panic of 1907.

Mr. Snyder cites cycles with statistics and accurate length. They vary from five months to nearly eleven years. Of the many relationships cited for forecasting business in various lines, he says: "The difficulty with all these relationships is that none of them has been found to hold invariably." He says good times are easier to forecast because of the long slow upward movement, but it happens to be bad times for which we most need warning.

—WILLARD L. HAMMER.



## Some of the elements of MANUFACTURING COSTS *may be lower in other sections*



1. You can hire labor elsewhere for less per hour than in Piedmont Carolinas, in some places for *much* less, but few sections provide workmen and workwomen at less per unit of finished product. And few indeed offer such a reservoir of intelligent, loyal, native born operatives both skilled and unskilled.

2. Some sections of the country approach Piedmont Carolinas in raw material resources but in many lines of agricultural, mineral and forest products, it has no equal.

3. The extensive hydro-electric system of Piedmont Carolinas, carrying power over more than 3000 miles of transmission line to 1600 thriving communities, is one of the nation's outstanding examples of electrical development.

4. Land is plentiful, and new, sparsely settled regions are rapidly being opened up by paved roads and power lines. Brick, stone and lumber are produced in abundance and contiguous to the section are three important cement and steel areas. Labor, in the building trades, is constantly being recruited from the agricultural field and delivers an honest day's work. Consequently, construction shares in the region's low cost advantages.

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### 72 New Industrial Plants During Past 12 Months

INDUSTRIAL engineers from other sections, making surveys for their clients, have gathered data on manufacturing costs for the whole country. They have stated that, as a result of the six basic economic factors brought to a focal point in Piedmont Carolinas, manufacturing costs in many lines are lower here than anywhere else in the United States. Their figures show savings equal to a very substantial extra dividend on a year's operations.

The large and active markets in and surrounding Piedmont Carolinas afford an added powerful incentive.

These facts are behind the migration of manufacturing plants (averaging one every five days all last year) to the opportunity that awaits them in Piedmont Carolinas.

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(In this book you will find *complete*, authoritative data, tonnage tables, wage scales, markets, etc., etc., that cover just the facts you need to form a clear judgment. Brief. Condensed. Write for it today).

5. Piedmont Carolinas is 300 miles nearer the nation's center of population than, for example, New York City. It embraces within a 600-mile radius (the economical marketing circle) 50.1% more of the country's purchasing power. This is availability to the national market.

6. Legislation, both state and local, is sane, reasonable and encouraging to industry. The lawmakers of both the Carolinas recognize the advantages to the people of a wide development of manufacture. Best index of their attitude is the number of new enterprises attracted to the section during the last year. Burdensome regulation, restriction, and corporation-baiting do not invite such a migration.

### Bracing Summers Mild Winters

Piedmont Carolinas enjoys a *summer* climate equal to that of Pennsylvania with its Poconos. The Berkshires of Massachusetts and the Catskills of New York have their counterpart in the bracing upland sections of the Blue Ridge. But in *winter* the Southern sun warms the Piedmont, so that the temperature during that season averages 10° to 20° *above* the Pennsylvania-New York-Massachusetts sector.

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AMERICANS SHOULD PRODUCE THEIR OWN RUBBER... *Harvey Firestone*

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Send me NATION'S BUSINESS, your official monthly publication, beginning with the March number. Bill me later for \$7.50 for the three year term-subscription (OR: I enclose remittance with this coupon).

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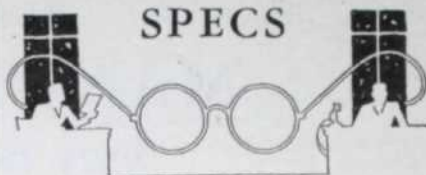
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## THROUGH THE EDITOR'S SPECS



**W**E CAST about for something especially fine to wish our readers for 1928. Something permanent, stable, deeply enduring. When one wishes hard enough, and long enough, it is said, the thing comes to pass.

So it is with great pleasure that we are able to announce the almost perfect gift for 1928. It is health, happiness and prosperity rolled into one, and, like all decisive phenomena in the world's history, it, too, comes from an unexpected quarter.

But enough of introductory delay. The suspense must not be prolonged. Here is what 1928 holds for each and all of us.

The Federal Bureau of Home Economics has concluded, as a result of returns from 3,000 questionnaires, that an anthropometric study must at once be made of the women of the nation.

"Doubtless every woman," reads the statement prepared by Maude Campbell, Assistant Specialist, in the Division of Clothing, Textile & Cloth, Bureau of Home Economics, Department of Agriculture,

has had difficulty at some time with the fit of a garment, whether she made it herself, hired a dressmaker, or purchased it ready-made. The cost of fitting garments, plus the decreased value and loss through misfits, is an important part of the \$8,500,000,000 annual clothing bill of the United States.

Recent surveys show that women who do their own sewing have more difficulty with altering patterns and fitting garments than with any other part of garment construction.

There is economic loss, too, if full return is not obtained from the materials used. So much dissatisfaction may result from an ill-fitted garment that it is soon cast aside or it is not worn at all.

Thus the drab picture of the nation's economic waste, discouragement and internal discontent. Now for the solution.

"In the anthropometric study," says Ruth Van Deman, also an Assistant Specialist, Clothing, Textile & Cloth Division, Bureau of Home Economics, Department of Agriculture, "measurements of thousands of figures will be made. From these, standard measurements can be made for patterns. In the meantime, the Bureau has prepared instructions for fitting garments for the immediate use of home sewers. The larger study will not be completed for two or three years."

The Government has found that clothing manufacturers and pattern makers (page Messrs. Butterick, Vogue, McCall, Delineator, et al.), have been using patterns these many years for their short-



stout, tall-stout, extra-short-stout, extra-tall-stout, out-sizes, which were not based on scientific or anthropometric studies. This, the Government will rectify.

There is a slight catch in it, however. The Bureau admits that even after the larger study is completed, "there will still be some fitting problems. Every person's build is affected somewhat by habits of walking, standing, and sitting, by the kind of work done, and more or less by the fashion in dress." But the larger work will be done, nevertheless.

Readers should write at once for the first of these bulletins, which "describes and illustrates as far as possible where the main lines of the well-fitted garment should fall in relation to the figure." There are "only a limited number of copies," so hurry, hurry, hurry! And remember the number of the pamphlet is 1530, 1-5-3-0; 1529 or 1531 might bring a perfectly useless bulletin such as *Curtain-Culture*, or a monograph on *Does the Porcupine Really Shoot Its Quills?*

#### PARADOXES in a month's news:

Westminster Abbey is losing battle with decay . . . and a new prayer book is voted by the House of Lords. Investigators report that women in Russia have more freedom than women in America . . . and 2,200 men pay alimony in Baltimore. Wall Street executives drink daily half dozen glasses of water . . . and Kresge, chain-store magnate, gives half a million for "dry" education.

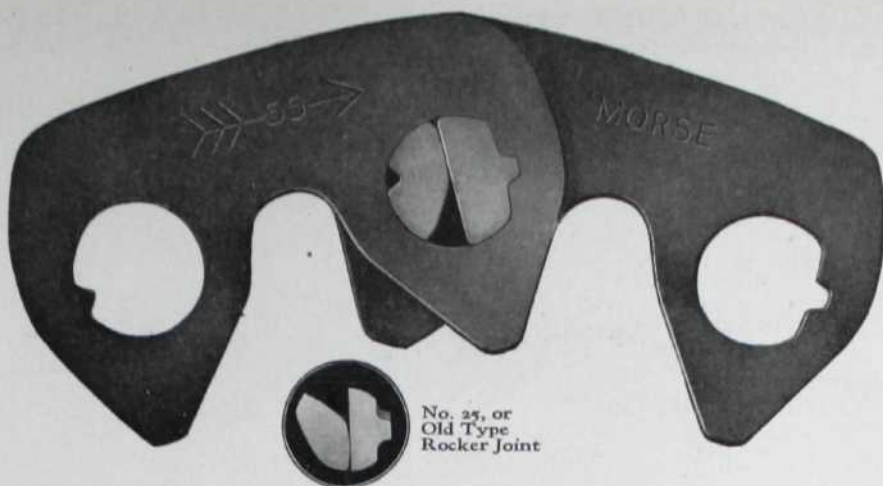
Professor John Erskine says Christianity has stopped in this country . . . and Presbyterians propose erection of \$5,000,000 cathedral in Washington. West Point and Annapolis break off annual football game . . . and the President commends a billion-dollar Navy program.

A soil expert says the corn belt is losing its fertility . . . and Chicago plans a world fair for 1933. A four-billion candlepower "ad" lights up New York . . . and Skjellerup comet appears on the horizon. American merchant marine declines 585 ships in one year . . . and Cunard Company plans two \$30,000,000 liners.

Bandits rob University of Chicago of \$15,000 . . . and Yale's endowment fund campaign tops \$20,000,000 goal. Senate refuses seats to Vare and Smith . . . and scientists offer to apply anthropological tests to Congress. Chicago widow sends plane for bridegroom . . . and America is cited as laggard in aviation research.

Keith and Orpheum circuits join in \$10,000,000 merger . . . and a wave of expansion strikes Hollywood. Supreme Court holds motorists responsible for safety at grade crossings . . . and scientists study speed of glaciers.

*Mayflower* descendants oppose raising of immigration quota . . . and herediscopes shows heredity a gamble. New York metropolitan area includes 9,000,000 people . . . and transit official declares subway air is pure. The Rev. C. F. Potter finds Pittsburgh lowest on his



No. 25, or  
Old Type  
Rocker Joint

## The Improved Morse Rocker Joint, Type #55

**T**HIS is the improved design of Morse Rocker Joint which adds even longer life to Morse Silent Chains. Retaining all of the advantages of the old Rocker Joint, this new design provides a better balanced joint with a more nearly round hole for the pins. This means reduced wear and longer chain life.

The contour of the rocker pin has been changed and the cross section of the seat pin has been increased. This gives a more rugged and sturdy joint, 8% heavier, and with an increase of 50% in breaking strength.

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**C**OMPARED with S. A. E. 1020, the rate of penetration of carbon for Hymo Steel is much greater due to its manganese content. It thus develops a given depth of case far more quickly. The time saved in carburizing depends on operating conditions but in many instances amounts to 25%.

This comparison presents an example of the economies developed by Hymo Steel that will be readily understood.

UNION DRAWN STEEL CO.  
Beaver Falls, Pa.

UNION DRAWN  
STEELS

"cultural map" of America . . . and a steel worker's daughter triumphs in grand opera rôle.

American women beautiful but cold, Briton says . . . and Texas Guinan's night club loses curfew plea.

**T**HE INTERDEPENDENCE of business has been our text many times in this column. We have told how the invention of Eskimo Pie paid for pianos in Ecuador; how Ohio jobbers suffered when Russia quit drinking tea; how Chinese pigtailed also won the war.

Now we learn that the machine tool builder, of whom Berton Braley sings in this number, is bringing worry to the butcher. It's this way. Machinery is releasing men from back-breaking tasks. Less physical exertion means less physical nourishment. The sales of beefsteaks and pork roasts suffer. Q. E. D.

**S**OMETHING of a novelty is Frank W. Smith's denial of the cold-bloodedness of chief executives, chief engineers, and high-directing officials in general. When giving his views on accident prevention campaigns to the Sixteenth Annual Safety Congress in Chicago he bluntly rejected the "hard-boiled" notion of business men.

To his way of thinking, the selling refrain "show him it pays to prevent accidents" is overdone. As vice-president and general manager of the United Electric Light and Power Company of New York, Mr. Smith is in position to know the ways of the executive group. Here is the picture he drew from life:

As a matter of fact, your executive usually has a wife and children; he probably plays golf (let us hope he does) or he is interested in some other attractive and health-giving outdoor sport. He has or ought to have a sense of humor and enjoys a good story; sheds a tear in the theater now and then, and eventually goes the way of all flesh. In other words, the executive is usually an ordinary human being, with the same warm blood, the same emotions, the same love of life and the same aversion to suffering and premature death—both for himself and the other fellow—that all human beings have.

It is true that the practicalities of business tend to make its practitioners more receptive to dollars-and-cents arguments than to "sob stuff." And just as surely, logic, statistics, or financial considerations do not wholly rule their decisions. No management in active contact with its workers can escape a fellow-feeling for those workers. In that feeling is a stronger motive for subscribing to safety drives than economic gain. To its great cost, business has been too backward in acknowledging possession of a heart as well as a head. Mr. Smith opportunely directs the public to use the stethoscope.

**T**HAT "there ought to be a law" is still a national slogan is emphasized again in a report of the Insurance Federation of America. By the compilation of its secretary, 2,108 insurance bills were in-



roduced during sessions of the forty-five legislatures that met during 1927. For the sessions in 1925, the total was 1,460. When a gain of 44 per cent in proposed legislation can be made in two years, it must be because the Fewer-Laws Clubs are holding more social sessions than business meetings.

FROM time to time we have descanted on the pernicious growth of bureaucracy, and spoken in measured cadence of the God-given attributes of individualism. The best example of our thesis was found in the daily press recently, in the reports of the heart-breaking S-4 disaster. A reporter asked Admiral Brumby if certain operations of rescue were to be carried on. He replied that he didn't know.

"I have referred the matter to Washington," he said.

NO ONE is likely to gainsay the assertion of the Clock Manufacturers Association that the public is more alert to ways and means of saving time and steps. And most opinions will go along with the Association in its belief that the awakening of public interest to the value of time gives inviting opportunity to the retailers of clocks and watches. The more clocks there are and the more visible they are, the Association reasons, the more thousands of dollars and millions of steps people will save and use for more productive effort or cultural development. And as for the home,

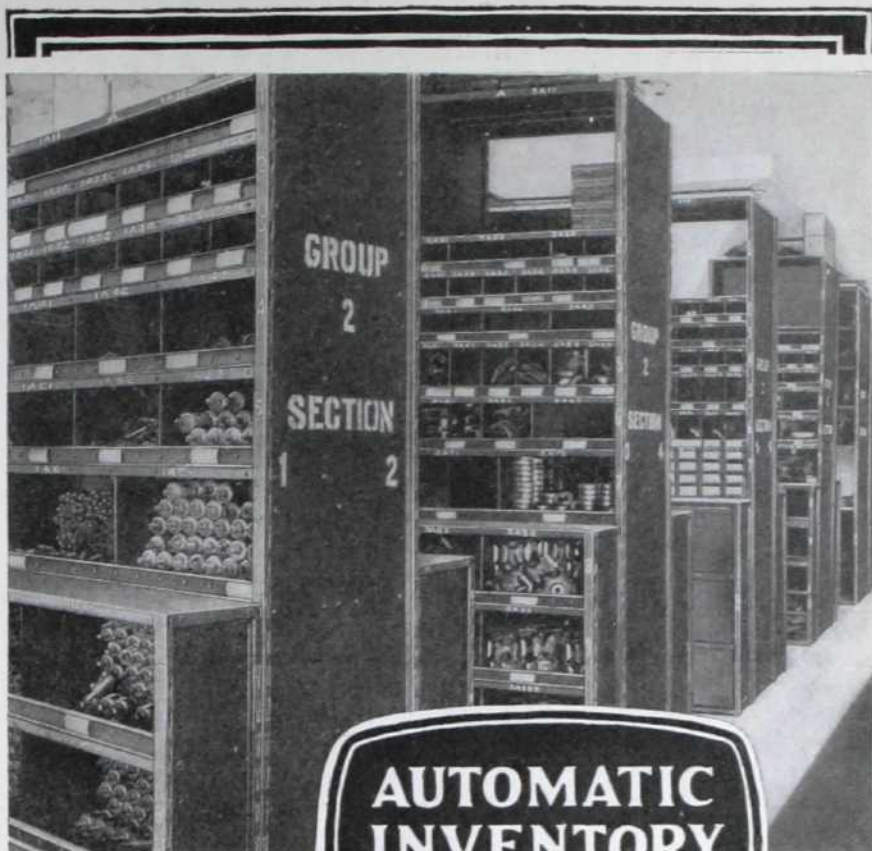
although millions of clocks were given to June brides, still the surface of public need is only scratched and the appreciation of the general stylishness of clocks, the recognition of the absolute need of at least one clock in every room and a more active merchandising of clocks, similar to efforts being made for radio and other household equipment and decorative needs, are yet to be accomplished.

Nothing less than a nation of clock-watchers would satisfy the scope of that wide-spreading declaration of potential demand. But fulfilled, it would help maintain the social equilibrium—a five-clock family would be in no mood to take the dust of a two-car family.

PROFESSOR WILLIAM E. DODD of the University of Chicago and the packers of Chicago, ought to get together for luncheon or something. The professor told the Farm Bureau that "the condition of the small home-owning farmer is worse than it has ever been. He receives ten cents a pound for pork on the hoof (sic) while the consumer pays 50 cents a pound for bacon."

I can imagine Tom Wilson or Louis Swift replying across the luncheon table that if the professor will show the farmer how to grow hogs that are all bacon, he will get more than 10 cents a pound on the "hoof."

Further, the professor says a farmer nowadays wonders why "he should hold his children to a calling stigmatized everywhere." The professor would render a real service if he would tell us who has



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# "Natural Automotive Center of the West"



Durant Motor Company of California.

Willys-Overland Pacific Company.

Chevrolet Motor Company of California.



J. R. EGGERT, production manager of the Pacific Coast Chevrolet plant of the General Motors Corporation, at Oakland, California, writes:

"Oakland is the natural automotive center of the West—something which we have demonstrated to our own satisfaction in the ten years that General Motors has operated a Chevrolet assembling plant here. From Oakland we serve the eleven western states and dealers in the Orient most successfully.

"Climatic conditions are most favorable for year-round operation. We test cars in the open practically every day in the year."

J. W. Hawk, vice-president and branch manager of the Willys-Overland Pacific Company, finds:

"Since locating in Oakland we have found that the reasons for choosing this city were very real ones. Nineteen twenty-seven was a very profitable year. We have made consistent sales gains and 1927 shows an increase of approximately 35 per cent over 1926.

"No small part of this gain has been due to the facilities which our location in Oakland has allowed us."

Norman De Vaux, general manager of the Durant Motor Company of California operating the Star car factory, says:

"Oakland offers remarkable rail facilities, enabling us to serve the 11,000,000 people of the Pacific Coast states at minimum expense. Splendid water facilities are available for our export business to the Hawaiian Islands, Philippine Islands, China, Japan and India."

Oakland is also the home of the Fageol Motors Company, builders of Fageol trucks and Fageol buses, used generally throughout the United States.

The major Pacific Coast plant of the Ford Motor Co., covering nearly 75 acres and representing an investment of \$5,000,000 in buildings and equipment alone, is within eight miles of the City of Oakland.

"We Selected Oakland," a booklet containing statements of many nationally-known concerns as to the advantages they have found in operating in Alameda County, will be mailed you for the asking. A technical industrial report will be prepared for any interested manufacturer on request. Write Industrial Department.

## Oakland Chamber of Commerce • Oakland, California

or the Chamber of Commerce of any of the following cities:

Alameda Berkeley

Centerville Emeryville Hayward Irvington Livermore  
Newark Niles Pleasanton San Leandro

stigmatized the farmer. To the politician, the farmer is one of God's noble-men; by the city press, he is held up as the embodiment of all that is worthy; the church, the school, ditto. Perhaps the Chicago educator might find that the stigmatizers of the farmer are his own alleged friends.

AT ONE time, we thought of offering a large reward to the first man who would tell us where we could find an old-time blacksmith shop. Somehow, we never got around to doing it. There must still be a considerable number of horses, we argued. 'Who shoes them? Now we have the answer from our old friend Bristow Adams, who edits publications of the New York State College of Agriculture at Cornell University. The farmers, he says, shoe their horses.

Where once the village smithy stood is now a gas station or a garage. But the manufacturers, the university, and the Government are making it easy for the farmer. Ready-to-wear shoes have been made available, and Prof. Henry Asmus of the New York State Veterinary College, and J. O. Williams of the United States Department of Agriculture have published a bulletin on farm horseshoeing.

Here is a homely example of the resourcefulness inherent in our business structure. Let a need only be made articulate, and men and materials will be immediately joined to undertake its satisfaction. "Ready-to-wear horseshoes." There's a newsy footnote on our industrial progress.

TWO FELLOW workers in the vineyard take time out to write. Hewitt H. Howland, editor of *Century Magazine*, says:

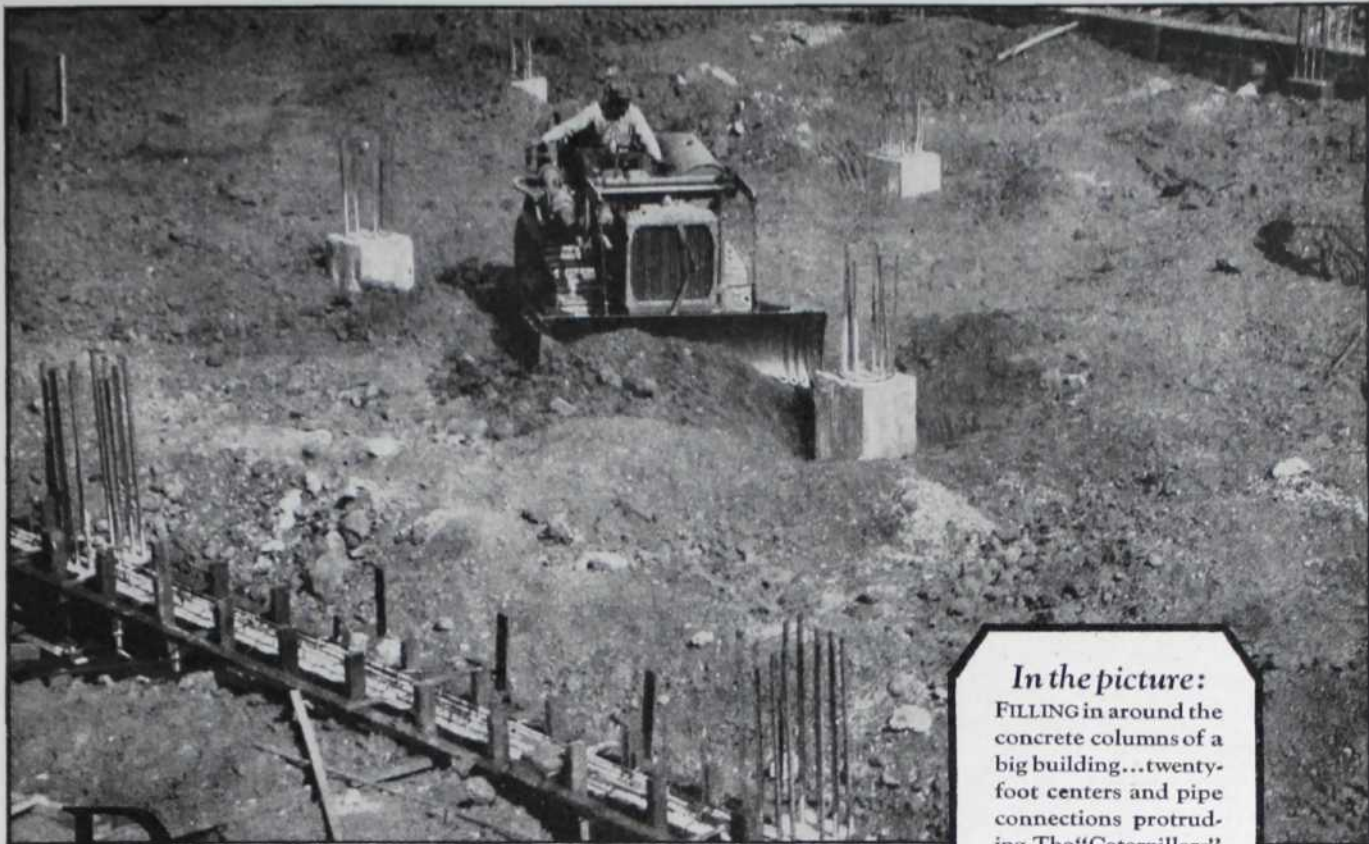
We receive the *NATION'S BUSINESS* and find it both interesting and useful—especially useful in suggesting subjects for treatment in *Century*.

And from Andrew S. Wing, managing editor of *Farm and Fireside*, commenting on Walter Burr's article, "Making Fewer Farmers Buy More Goods," in our September number:

It is exceptionally good. It is sound, points a lesson which needs to be put across, and it is well told. So much bunk has been written about the farmer during the past few years of depression that it is interesting to run across such an article

THOSE economists and business seers who last month predicted that 1928 would be a year of intense competition evidently knew what they were talking about. From Piggot, Arkansas, comes the news that because it costs 50 cents more to procure a marriage license in Clay County, Ark., than in a neighboring county in Missouri, the Clay County Quorum Court decided to meet the competition and as a result ordered that licenses to wed be reduced from \$3.60 to \$3.10.





*In the picture:*

FILLING in around the concrete columns of a big building...twenty-foot centers and pipe connections protruding. The "Caterpillars" navigated nicely in the narrow quarters...men and minutes saved,

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"Caterpillar" track-type tractors with bulldozer or backfiller make a profitable working partner on a multitude of jobs. Amazing economies in leveling, filling trenches, making fills, hauling earth...these "short cuts" win the contract for "Caterpillar" owners.

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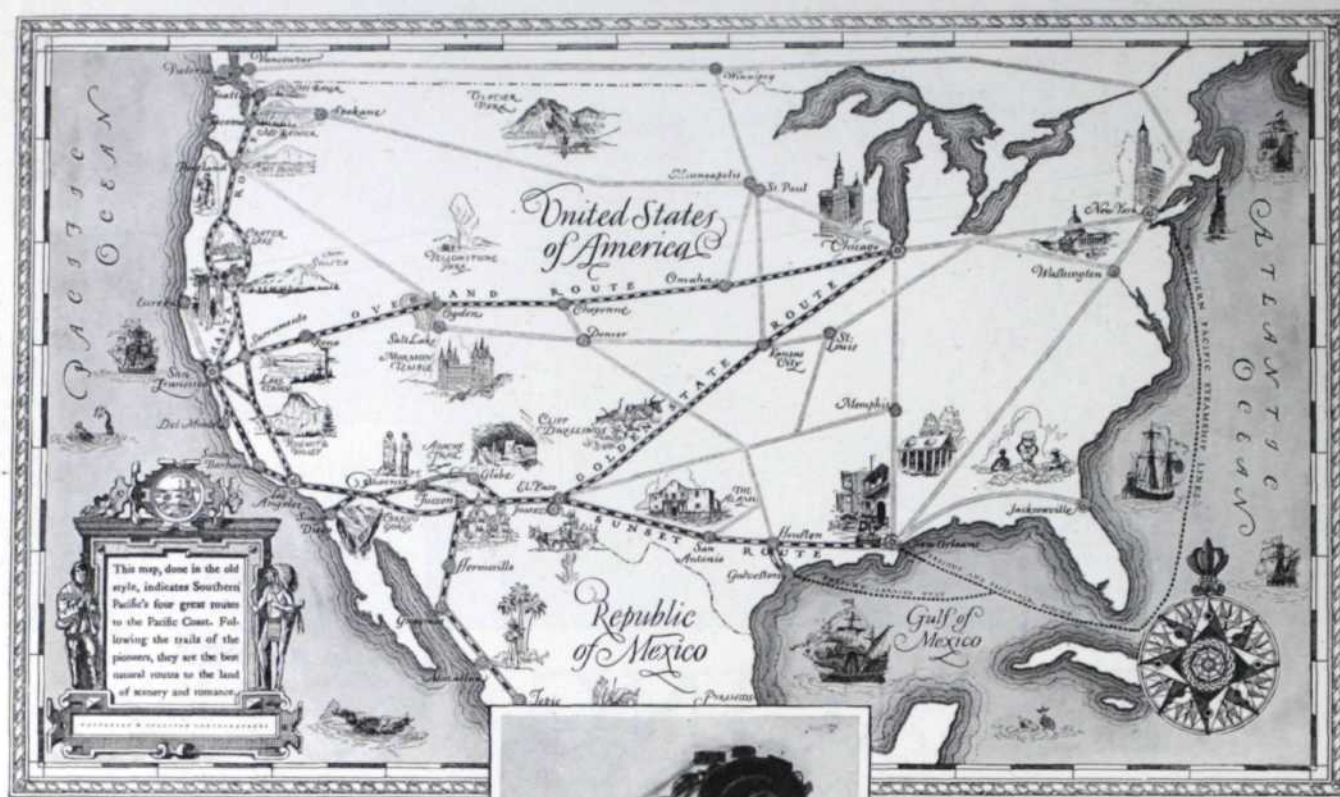
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Southern Pacific, truly transcontinental system, operating its own steamships, New York to New Orleans, and 16,724 miles of rail lines, offers a choice of four great routes to the Pacific Coast. Stop over anywhere. You can go one way, return another, seeing the whole Pacific Coast at minimum expense. Only Southern Pacific offers this choice:

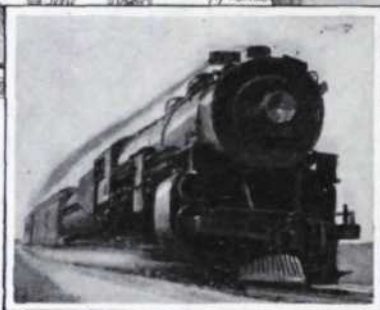
**SUNSET ROUTE**, New York to New Orleans by steamship or rail; thence by rail across Louisiana and Texas via Houston; the Magic Valley of the Lower Rio Grande side trip; San Antonio and its historic Alamo; El Paso with

glimpse of Old Mexico; Apache Trail Highway of Arizona; San Diego, Los Angeles and San Francisco;

**GOLDEN STATE ROUTE**, the direct line from Chicago and Mississippi Valley cities to Los Angeles, San Diego (through Carrizo Gorge) and Santa Barbara—via Kansas City and El Paso, over prairie, mountain, painted mesa;

**OVERLAND ROUTE** (*Lake Tahoe Line*), shortest route across the center of the continent via Omaha and Ogden, crossing Great Salt Lake by rail, over the Sierra Nevada, along Donner Lake, American River Canyon and down through the picturesque gold country of 49 days to San Francisco; and

**SHASTA ROUTE**, Pacific Northwest to San Francisco via Portland, Crater Lake



and Mount Shasta. For travelers to California by northern lines.

Over each route is operated, among other fine trains daily, a premier train unsurpassed in service and appointments. These are: "Sunset Limited," famed 'round the world; "Golden State Limited," nothing faster between Midwest and Southern California; on Overland Route the "San Francisco Overland Limited," and, on Shasta Route, the fast, new "Cascade".

Southern Pacific agents are in nearly all large cities. Let them help you plan your trip.

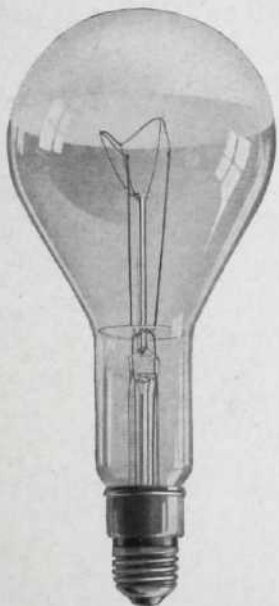
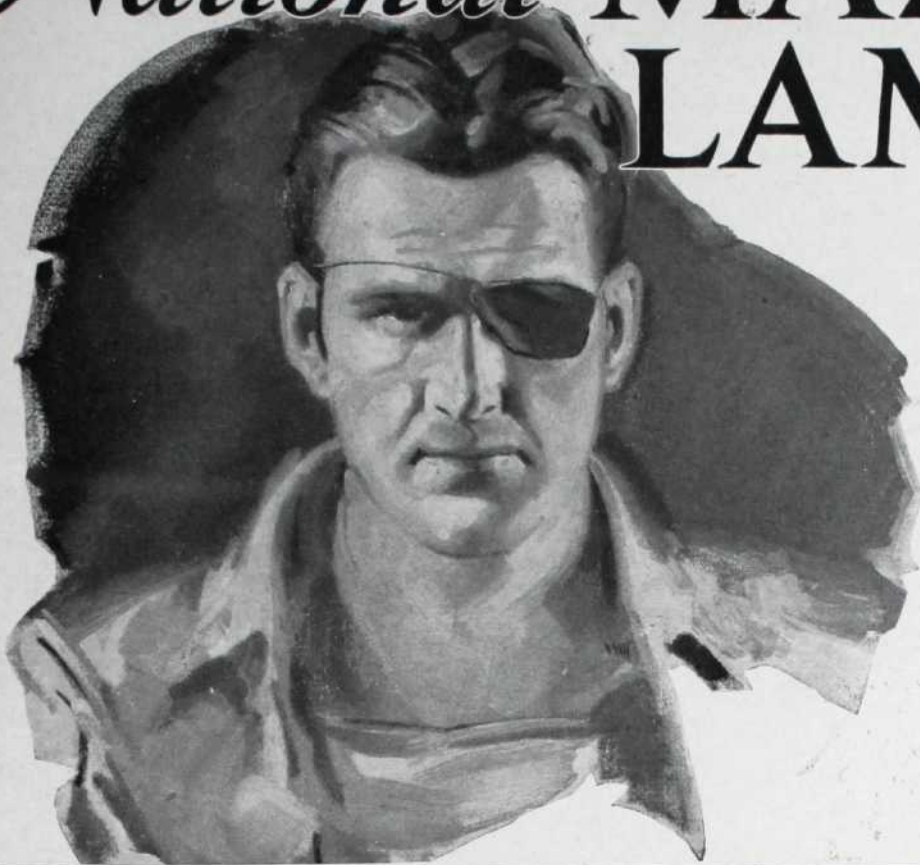
Write your name and address in the margin below, tear off and mail to E. W. CLAPP, traffic manager, Dept. V-1, Room 1022, 310 S. Michigan Boulevard, Chicago, for illustrated booklet, "How Best to See the Pacific Coast".

## Southern Pacific





# National MAZDA LAMPS



MAZDA is not the name of a thing, but the mark of a Research Service centered in the Research Laboratories of General Electric Co.



## One Eye!

**Y**OU'D be dumbfounded to find each man in your factory with one eye blindfolded.

You'd put a stop to it at once—because you would know it meant slower production, more spoilage, more accidents!

Yet it may be that precisely this condition exists in your plant now. Because poor lighting has just the same

result in cutting down the worker's effective vision.

Glare and dimness blindfold your men. Wrong lamps, wrong spacing, blindfold your men. You soon see why and how, when it's pointed out.

If your lighting installation is five or more years old, it is obsolete. Our new free book "*Plain Facts about Factory Lighting*" tells why.

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